A NOVEL OF THE FUTURE COMPLETE IN THIS ISSUE

STARTLING STORIES

15¢ JAN.

FEATURING

DEVIL'S PLANET

A Long Book-Length Novel of Martian Adventure

By MANLY WADE WELLMAN

A THRILLING PUBLICATION

DEVILS PLANET

MANLEY WADE WELLMAN

A WORLD FANTASY CLASSIC

1/6

I'll trust you

"SEND ME $1 and I'll send your choice of these Features I picked out. I'll give you a 10-DAY TRIAL and 10 MONTHS TO PAY or Money Back if you're not satisfied" . . . . .

Our founder, Leonard Wheeler Sweet, won the friendship of thousands of folks everywhere by making it easy for them to own fine jewelry—by giving good, honest value. I'm following in his footsteps—I'll help you own a diamond or watch and give nice gifts. Here are some special values I selected for you—would you like to examine any of them under my Money-Back Guarantee?

I'LL TRUST YOU—tell me what you want—simply put a dollar bill in an envelope with your name, address, occupation and a few other facts about yourself. This transaction will be between you and me—everything will be confidential.

I'll send your selection for approval and 10 days trial. If you're not satisfied that you received good, honest dollar for dollar value, send it back and I'll promptly return your dollar. If satisfied, you pay in 10 small monthly amounts you will never miss.

Just a few words about the suggestions that I show here. Take ring (A), for instance. Imagine — only $29.50 for this pretty ring. And the Cluster Ring (B)—it looks like a half carat solitaire when worn on your finger. It's a beauty—I'm sure you would like it. The Bridal Ensemble (C) is really two rings for the ordinary price of one. If it's an Engagement Ring you want, I recommend (D)—it's a perfect diamond—I'll give you an Affidavit sworn to by a diamond expert before a Notary Public. Initial Ring (E) would delight any man. It's extra heavy and beautifully designed. My watch suggestions I am proud of. Bulova Watches are fine timekeepers and great values. The Kent Watches I show are priced exceptionally low and are the latest styles. My great feature is the Silverplate Set with Tablecloth and Napkins. I expect this to be one of my popular sellers — because of it's exceptionally low price.

These are just a few of the many values I have. Choose here and send your order today, or send for my complete 48-page catalog showing hundreds of diamonds and watches, jewelry and silverware, all offered on my 10-months-to-pay-plan.

Jim Feeney
Sales Mgr.

L. W. SWEET
MAIL ORDER DIVISION
OF FINLAY STRAUS
1670 BROADWAY
DEPT. 720-A NEW YORK

A. $29.95
5 diamonds arranged nicely. New style ring. 14K yellow gold. $2.90 a month

B. $29.50
7 diamond Cluster; half carat size. 6 other diamonds. 14K yellow gold. $2.85 a month

C. $32.50
Bridal Set with 10 Diamonds. Both rings 14K yellow gold. $3.15 a month

D. $50
Sworn Perfect Diamond; 2 other diamonds; 14K yellow gold $4.90 a month

E. $16.95
Man's Initial Ring; 2 initials and diamond on black onyx. 10K yellow gold. $1.60 a month.

F. $19.95
Newest style 17 jewel Heart Watch in 10K yellow rolled gold plate with bracelet to match. $1.90 a month

G. $29.75
Ladies' Bulova watch; 17 jewels; 10K yellow Rolled gold plate case and bracelet. $2.88 a month

H. $29.75
17 jewel Bulova Feature for men. Beautifully designed 10K yellow rolled gold plate case with leather strap. Exceptional value. $2.88 a month

J. $19.95
17 jewel curved watch; fits snug to wrist; 10K yellow rolled gold plate case; leather strap. $1.90 a month

83-Piece TABLE ENSEMBLE
Consists of
73 Pc. SILVERPLATE Complete with CHEST
8 Pure Linen NAPKINS
LOOM FILET LACE TABLE CLOTH (60" x 80")
ALL FOR $19.95

Send $1
PAY ONLY $1.90 A MONTH (Small Carrying Charge) on This FEATURE Only

My great feature—an exquisite 83 piece Ensemble. Service for 8. Silverplate service that includes such extras as additional teaspoons, salad forks and serving pieces. All pieces pure silver on 18% nickel base. 8 pure linen napkins and a gorgeous loom fillet lace tablecloth, 60 x 80 in. All these I offer at only $19.95. Don't miss it — send order today.

"THE BOSS DIDN'T EVEN KNOW MY NAME"

"HE SAID he remembered seeing me around, but he didn't even know my name until the I. C. S. wrote him that William Harris had enrolled for a course of home study and was doing fine work.

"'Who's William Harris?' he asked. Then he looked me up. Told me he was glad to see I was ambitious. Said he'd keep his eye on me.

"He did too. Gave me my chance when Frank Jordan was sent out on the road. I was promoted over older men who had been with the firm for years.

"My spare-time studying helped me to get that job and to keep it after I got it. It certainly was a lucky day for me when I signed that I. C. S. coupon."

• • •

One reason employers recognize the value of I. C. S. training is that many of them are former I. C. S. students. They recognize that "today's I. C. S. students are tomorrow's leaders."

In the 50 years since these Schools were founded, more than $5,000,000 has been spent in preparing and revising texts. A personal, individual method of instruction has been developed. Isn't it better to get the facts now—than to wait five years and wish you had?

INTERNATIONAL CORRESPONDENCE SCHOOLS

BOX 3969-T, SCRANTON, PENNA.

★ Without cost or obligation, please send me a copy of your booklet, "Who Wins and Why," and full particulars about the course *before* which I have marked X: ★

TECHNICAL AND INDUSTRIAL COURSES

☐ Air Brake
☐ Air Conditioning
☐ Airplane Drafting
☐ Architectural Drafting
☐ Architecture
☐ Auto Engine Tune-up
☐ Auto Technician
☐ Aviation ☐ Aviation Mechanic
☐ Boilermaking
☐ Bridge Engineering
☐ Chemistry
☐ Civil Engineering
☐ Coal Mining
☐ Concrete Engineering
☐ Contracting and Building
☐ Cotton Manufacturing
☐ Diesel Engines
☐ Electrical Drafting
☐ Electrical Engineering
☐ Electric Lighting
☐ Foundryman ☐ Heating
☐ Heat Treatment of Metals
☐ Highway Engineering
☐ House Planning
☐ Industrial Metallurgy
☐ Locomotive Engineer
☐ Machinist
☐ Management of Inventions
☐ Marine Engines
☐ Mechanical Drafting
☐ Mechanical Engineering
☐ Mine Foreman
☐ Navigation
☐ Patternmaking ☐ Plumbing
☐ Practical Telephony
☐ Public Works Engineering
☐ Pulp and Paper Making
☐ Radio, General
☐ Radio Operating
☐ Radio Servicing
☐ R. R. Section Foreman
☐ R. R. Signalman ☐ Refrigeration
☐ Sanitary Engineering
☐ Sheet Metal Work
☐ Ship Drafting
☐ Shipfitting ☐ Shop Practice
☐ Steam Electric ☐ Steam Engines
☐ Steam Fitting
☐ Structural Drafting
☐ Structural Engineering
☐ Surveying and Mapping
☐ Telegraph Engineering
☐ Telephone Work
☐ Textile Designing
☐ Toolmaking ☐ Welding
☐ Woolen Manufacturing

BUSINESS COURSES

☐ Accounting ☐ Advertising
☐ Bookkeeping
☐ Business Correspondence
☐ Business Management
☐ Cartooning ☐ Civil Service
☐ College Preparatory
☐ Commercial
☐ Commercial Illustrating
☐ Cost Accounting
☐ C. P. Accounting
☐ First Year College
☐ Foremanship ☐ French
☐ Good English
☐ High School
☐ Managing Men at Work
☐ Railway Postal Clerk
☐ Salesmanship
☐ Secretarial ☐ Spanish
☐ Showcard and Sign Lettering
☐ Traffic Management

HOME ECONOMICS COURSES

☐ Advanced Dressmaking
☐ Foods and Cookery
☐ Home Dressmaking
☐ Professional Dressmaking and Designing
☐ Tea Room and Cafeteria Management, Catering

Name.....*Age*.....*Address*.....

City.....*State*.....*Present Position*.....

Canadian residents send coupon to International Correspondence Schools Canadian, Limited, Montreal, Canada
British residents send coupon to I. C. S., 71 Kingsway, London, W. C. 2, England

★ THE BEST IN SCIENTIFICTION ★

STARTLING STORIES

Vol. 7, No. 1 CONTENTS January, 1942

A Complete Book-Length Scientifiction Novel

DEVIL'S PLANET

By MANLY WADE WELLMAN

Fresh from Earth, Young Dillon Stover is Plunged into a Mystery on Mars! Tour Pulambar, the Martian Pleasure City, with this Intrepid Earthman as Your Guide..... 15

Other Unusual Stories

CHRISTMAS ON GANYMEDE.....Isaac Asimov 83
The Yuletide Season Brings Turmoil on Jupiter's Moon

THE FITZGERALD CONTRACTION.....Dr. Miles J. Breuer 94
An Outstanding Classic from Scientifiction's Hall of Fame

GEARS FOR NEMESIS.....Raymond Z. Gallun 106
There Was Only One Way to Save the Day for the Trail Blazer's Passengers

Special Features

THE ETHER VIBRATES.....Announcements and Letters 10

THRILLS IN SCIENCE.....Oscar J. Friend 78

SCIENCE QUESTION BOX.....Answers to Queries 93

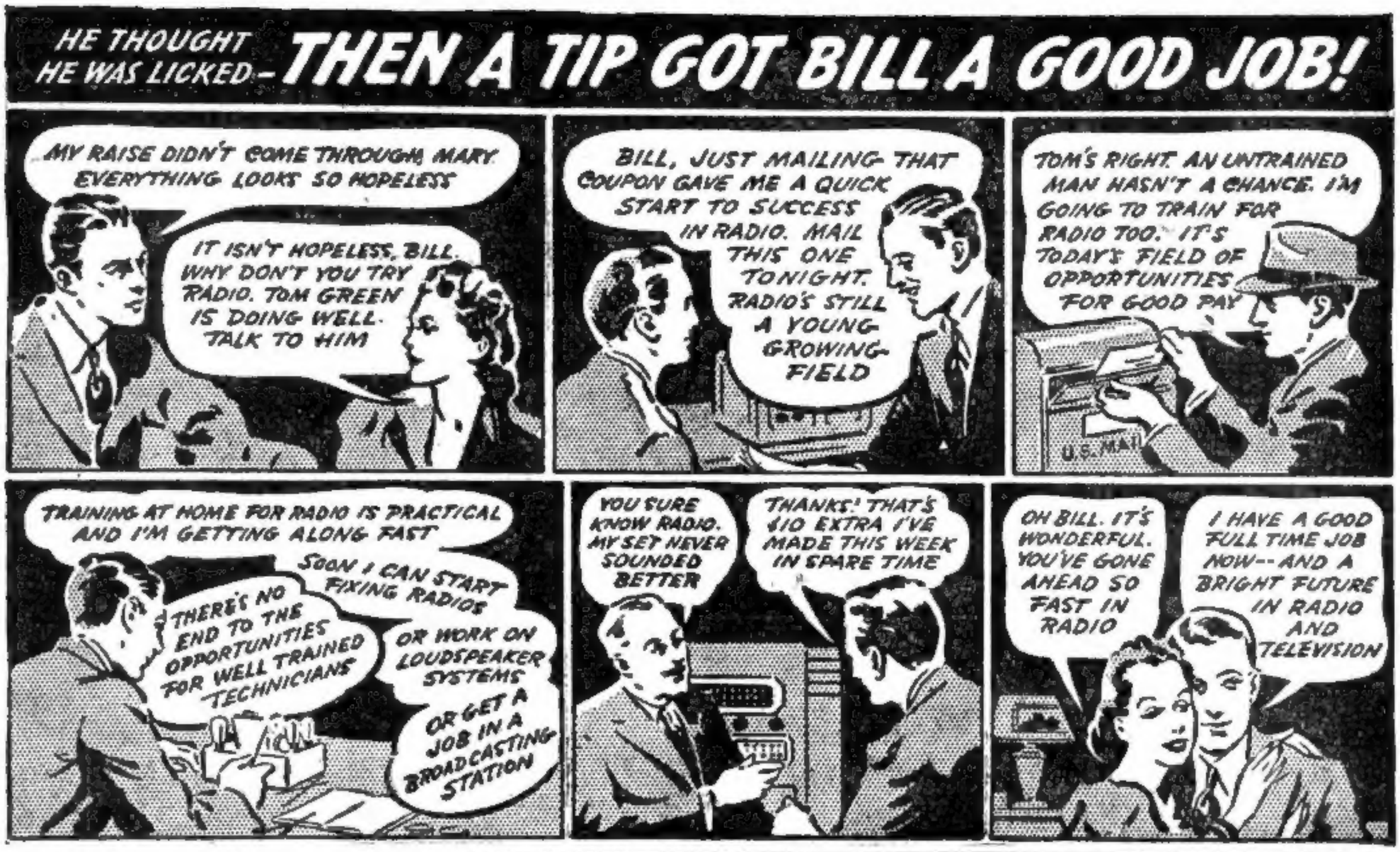
REVIEW OF FAN PUBLICATIONS.....Sergeant Saturn 126

Cover Painting by Rudolph Belarski—Illustrating DEVIL'S PLANET

STARTLING STORIES, published every other month by Better Publications, Inc., N. L. Pines, President, at 4600 Diversey Ave., Chicago, Ill. Editorial and executive offices, 10 East 40th St., New York, N. Y. Entered as second class matter September 29, 1938, at the post office at Chicago, Illinois, under the act of March 3, 1879. Copyright, 1941, by Better Publications, Inc. Yearly $.90, single copies $.15; foreign and Canadian postage extra. Manuscripts will not be returned unless accompanied by self-addressed stamped envelope and are submitted at the author's risk. Names of all characters used in stories and semi-fiction articles are fictitious. If a name of any living person or existing institution is used, it is a coincidence.

Companion magazines: Thrilling Wonder Stories, Captain Future, Popular Western, Thrilling Mystery, Thrilling Western, Thrilling Detective, Thrilling Adventures, Thrilling Love, The Phantom Detective, The American Eagle, RAF Aces, Sky Fighters, Popular Detective, Thrilling Ranch Stories, Thrilling Sports, Popular Sports Magazine, Range Riders Western, Texas Rangers, Everyday Astrology, G-Men Detective, Detective Novels Magazine, Black Book Detective, Popular Love, Masked Rider Western, Rio Kid Western, Air War, The Masked Detective, Exciting Detective, Exciting Western, Exciting Love, Popular Football, Thrilling Football, Exciting Football and West.

PRINTED IN THE U. S. A.


HE THOUGHT HE WAS LICKED— THEN A TIP GOT BILL A GOOD JOB!
MY RAISE DIDN'T COME THROUGH, MARY. EVERYTHING LOOKS SO HOPELESS
IT ISN'T HOPELESS, BILL. WHY DON'T YOU TRY RADIO. TOM GREEN IS DOING WELL. TALK TO HIM
BILL, JUST MAILING THAT COUPON GAVE ME A QUICK START TO SUCCESS IN RADIO. MAIL THIS ONE TONIGHT. RADIO'S STILL A YOUNG GROWING FIELD
TOM'S RIGHT. AN UNTRAINED MAN HASN'T A CHANCE. I'M GOING TO TRAIN FOR RADIO TOO. IT'S TODAY'S FIELD OF OPPORTUNITIES FOR GOOD PAY
U.S. MAIL
TRAINING AT HOME FOR RADIO IS PRACTICAL AND I'M GETTING ALONG FAST
SOON I CAN START FIXING RADIOS
THERE'S NO END TO THE OPPORTUNITIES FOR WELL TRAINED TECHNICIANS
OR WORK ON LOUDSPEAKER SYSTEMS
OR GET A JOB IN A BROADCASTING STATION
YOU SURE KNOW RADIO. MY SET NEVER SOUNDED BETTER
THANKS! THAT'S $10 EXTRA I'VE MADE THIS WEEK IN SPARE TIME
OH BILL. IT'S WONDERFUL. YOU'VE GONE AHEAD SO FAST IN RADIO
I HAVE A GOOD FULL TIME JOB NOW--AND A BRIGHT FUTURE IN RADIO AND TELEVISION

I Trained These Men

Chief Operator Broadcasting Station

Before I completed your lessons, I obtained my Radio Broadcast Operators license and immediately joined Station WMPC where I am now Chief Operator.
HOLLIS F. HAYES, 327 Madison St., Lapeer, Michigan.

Service Manager for Four Stores

I was working in a garage when I enrolled with N. R. I. I am now Radio Service Manager for the M—— Furniture Co. for their four stores.
JAMES E. RYAN, 119 Pebble Court, Fall River, Mass.

$10 a Week Extra In Spare Time

I am doing spare time Radio work, and I am averaging around $500 a year. Those extra dollars mean so much—the difference between just barely getting by and living comfortably.
JOHN WASHKO, 97 New Cranberry, Hazleton, Penna.

In U. S. Signal Corps

I am in the U. S. Army, Signal Corps, as Chief Radio Clerk. My duties also include maintenance of the transmitter and receivers when the Chief Radio Operator is absent.
R. W. ANDERSON, Radio Station WTI, Vancouver Barracks, Washington.

I WILL TRAIN YOU AT HOME
in your spare time for a GOOD JOB IN RADIO

Here is a quick way to more pay. Radio offers the chance to make $5, $10 a week extra in spare time a few months from now. There is an increasing demand for full time Radio Technicians and Radio Operators, too. Many make $30, $40, $50 a week. On top of record business, the Radio industry is getting millions and millions of dollars in Defense Orders. Clip the coupon below and mail it. Find out how I train you for these opportunities.

Why Many Radio Technicians I Train Make $30, $40, $50 a Week

Over 800 broadcasting stations in the U. S. employ thousands of Radio Technicians with average pay among the country's best paid industries. Repairing, servicing, selling home and auto Radio receivers (there are over 50,000,000 in use) gives good jobs to thousands. Many other Radio Technicians take advantage of the opportunities to have their own service or retail Radio businesses. Think of the many good pay jobs in connection with Aviation, Commercial, Police Radio and Public Address Systems. N. R. I. gives you the required knowledge of Radio for those jobs. N. R. I. trains you to be ready when Television opens new jobs. Yes, Radio Technicians make good money because they use their heads as well as their hands. They must be trained. Many are getting special ratings in the Army and Navy; extra rank and pay.

Beginners Quick! Learn to Earn $5, $10 a Week Extra In Spare Time

Nearly every neighborhood offers opportunities for a good part-time Radio Technician to make extra money fixing Radio sets. I give you special training to show you how to start cashing in on these opportunities early. You get Radio parts and instructions for building test equipment, for conducting experiments that give you valuable practical experience. You also get a modern Professional Radio Servicing Instrument. My fifty-fifty method—half working with Radio parts, half studying my lesson texts—makes learning Radio at home interesting, fascinating, practical.

J. E. SMITH, Pres. National Radio Institute Established 25 Years

Find Out How I Train You for Good Pay In Radio

Mail the coupon below. I'll send my 64-page book FREE. It tells about my Course; the types of jobs in the different branches of Radio; shows letters from more than 100 of the men I trained so you can see what they are doing, earning. MAIL THE COUPON in an envelope or paste on a penny postal.

J. E. SMITH, President, Dept. 2A09, National Radio Institute, Washington, D. C.

Extra Pay in Army, Navy, Too

Every man likely to go into military service, every soldier, sailor, marine, should mail the Coupon Now! Learning Radio helps men get extra rank, extra prestige, more interesting duty at pay up to 6 times a private's base pay. Also prepares for good Radio jobs after service ends. IT'S SMART TO TRAIN FOR RADIO NOW.

THIS FREE BOOK HAS SHOWN HUNDREDS HOW TO MAKE GOOD MONEY

J. E. SMITH, President, Dept. 2A09
National Radio Institute, Washington, D. C.

Mail me FREE, without obligation, your 64-page book "Rich Rewards in Radio." (No salesman will call. Write plainly.)

Age.....

Name .....

Address .....

City ..... State .....

Do *You* Smile at the Idea of Learning Music by Mail?

Here Are Some Facts That May Surprise You!

YOU HAVE undoubtedly heard of the U. S. School method of teaching music by mail. This remarkable system of instruction has been in operation for over forty years and more than 700,000 people in all parts of the world have enrolled for it. Men, women and children of all ages and from all walks of life have taken up their favorite musical instruments this convenient, money-saving way. They have studied the piano, violin, guitar, accordion and, in short, every kind of popular instrument.

No Special Talent Required

Many of these pupils did not know one musical note from another when they enrolled. Many had previously tried other methods of instruction without success. And not a few were frankly skeptical. They doubted whether it was possible to learn music by mail, just as you may doubt it.

To some of these "Doubting Thomases" it came as the surprise of their lives when they actually heard themselves playing. Simple popular melodies at first, then more and more advanced pieces, all the way to Grand Opera.

One after another, pupils testify to the amazing ease with which they learned, and the fascination and pleasure they found in the lessons. They say it was "easy as A. B. C."—"so simple that a child could understand"—that "with all the wonderful photographs and diagrams to guide you, you simply cannot go wrong"—that "it's really fun to learn music this easy, fascinating way."

Will You Accept This Challenge?

The experience of thousands upon thousands of people should be proof positive that you, too, can learn to play your favorite instrument by the famous print-and-picture method of the U. S. School of Music. Is it not a pity, then, to deny yourself all the enjoyment, the good times and popularity that music offers? Do you not owe it to yourself, at least, to examine all the facts, and to decide, once and for all, whether you can afford to pass by this opportunity to enrich your life with music?

If you really want to play a musical instrument—if you are willing to devote just a few minutes a day to learning, not through tedious, old-fashioned practice, but by actually playing real tunes—then you should mail the coupon at once. It will bring you an interesting illustrated booklet and free Print and Picture Sample that tells all about this wonderful way to learn music at home—without any special talent—without any previous knowledge of music at amazingly little cost. Read it carefully and earnestly and act upon it. If interested, tear out the coupon now, before you turn the page. (Instruments supplied when needed, cash or credit.) Address: U. S. School of Music, 2941 Brunswick Building, New York, N. Y.

(Established 1898)

INSTRUMENTS

As a special accommodation to our students we can supply instruments at a special discount. Liberal terms extended. For particulars, inquire Instrument Dept.

U. S. School of Music, 2941 Brunswick Bldg., New York, N. Y.

I am interested in music study, particularly in the instrument checked below. Please send me your free illustrated booklet, "How to Learn Music at Home" and free Print and Picture Sample.

Piano	Cello	Trombone	Drums and Traps
Violin	Hawaiian Guitar	Cornet	Ukulele
Guitar		Trumpet	Organ
Piano Accordion	Banjo	Flute	Modern Elementary Harmony
Plain Accordion	Mandolin	Piccolo	
Saxophone			

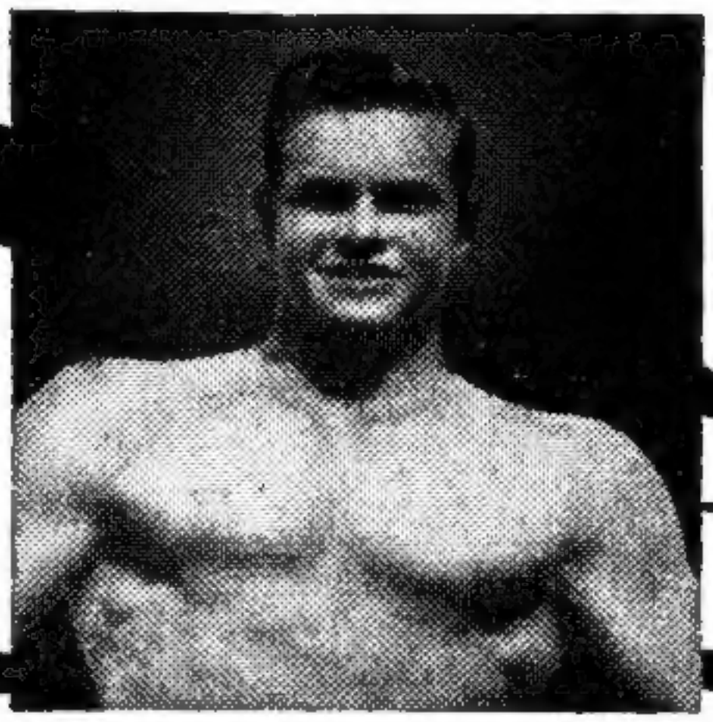
Name ..... Do You Have Instr? .....

Address .....

City ..... State.....

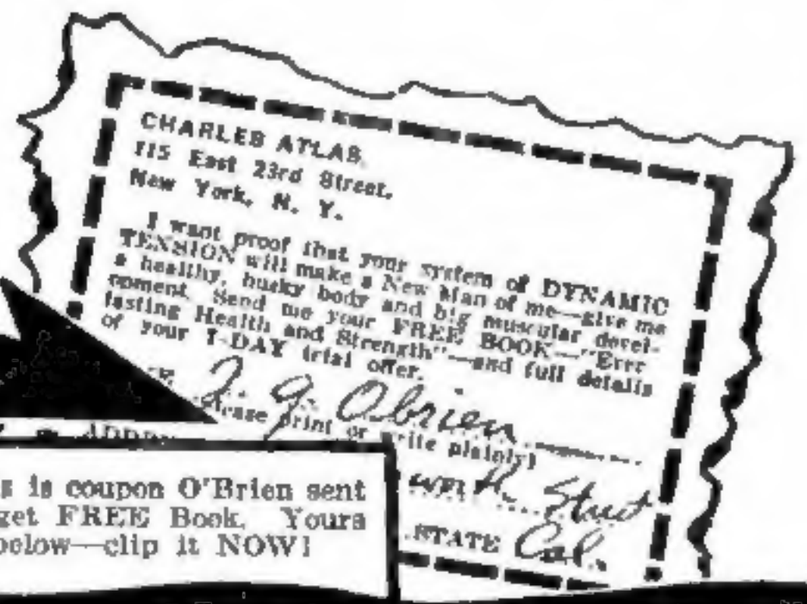
☐ Check here if under 16 years of age.

HE Mailed This Coupon



J. G. O'BRIEN
Atlas Champion Cup Winner

This is an ordinary snapshot of one of Charles Atlas' Californian pupils.

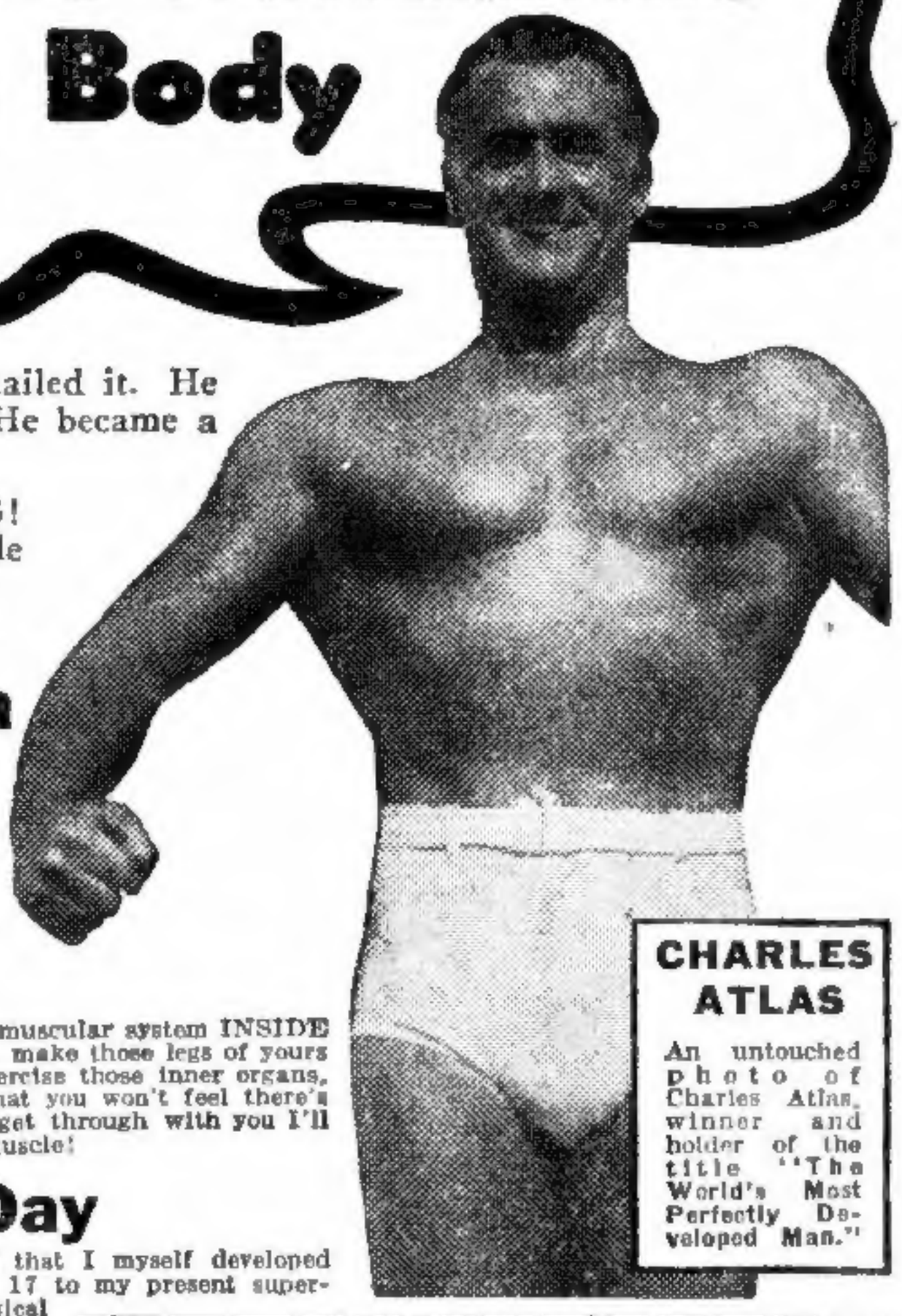

CHARLES ATLAS
115 East 23rd Street
New York, N. Y.
I want proof that your system of DYNAMIC TENSION will make a New Man of me—give me a healthy, husky body and big muscular development. Send me your FREE BOOK—"Everlasting Health and Strength"—and full details of your 7-DAY trial offer.
J. G. O'Brien
(Please print or write plainly)
STATE Cal.

This is coupon O'Brien sent to get FREE Book. Yours is below—clip it NOW!

...and Here's the Handsome Prize-Winning Body I Gave Him!

J. G. O'BRIEN saw my coupon. He clipped and mailed it. He got my free book and followed my instructions. He became a New Man. NOW read what he says:

> "Look at me NOW! *'Dynamic Tension'* WORKS! I'm proud of the natural, easy way you have made me an 'Atlas Champion'!"
>
> *J. G. O'Brien.*



"I'll Prove that YOU, too, can be a NEW MAN"—*Charles Atlas*

I don't care how old or young you are, or how ashamed of your present physical condition you may be. If you can simply raise your arm and flex it I can add SOLID MUSCLE to your biceps—yes, on each arm—in double-quick time! Only 15 minutes a day—right in your own home—is all the time I ask of you! And there's no cost if I fail.

I can broaden your shoulders, strengthen your back, develop your whole muscular system INSIDE and OUTSIDE; I can add inches to your chest, give you a vise-like grip, make those legs of yours lithe and powerful. I can shoot new strength into your old backbone, exercise those inner organs, help you cram your body so full of pep, vigor and red-blooded vitality that you won't feel there's even "standing room" left for weakness and that lazy feeling! Before I get through with you I'll have your whole frame "measured" to a nice, new, beautiful suit of muscle!

CHARLES ATLAS

An untouched photo of Charles Atlas, winner and holder of the title "The World's Most Perfectly Developed Man."

Only 15 Minutes a Day

"Dynamic Tension!" That's the ticket! The identical *natural* method that I myself developed to change my body from the scrawny, skinny-chested weakling I was at 17 to my present super-man physique! Thousands of other fellows are becoming marvelous physical specimens—*my way.* I give you *no gadgets or contraptions to fool with.* You learn to develop your strength through *"Dynamic Tension."* You simply utilize the DORMANT muscle-power in your own God-given body—watch it increase and multiply double-quick into real, solid LIVE MUSCLE.

My method—*"Dynamic Tension"*—will turn the trick for you. *No theory*—every exercise is *practical.* And, man, *so easy!* Spend only 15 minutes a day in your own home. From the very start you'll be using my method of *"Dynamic Tension"* almost unconsciously every minute of the day—walking, bending over, etc.—to BUILD MUSCLE and VITALITY.

FREE BOOK "EVERLASTING HEALTH AND STRENGTH"

In it I talk to you in straight-from-the-shoulder language. Packed with inspirational pictures of myself and pupils—fellows who became NEW MEN in strength, my way. Let me show you what I helped THEM do. See what I can do for YOU! For a real thrill, send for this book **today.** AT ONCE.
CHARLES ATLAS, Dept. 77-N, 115 E. 23rd St., N. Y. C.

CHARLES ATLAS
Dept. 77-N, 115 E. 23rd Street
New York, N. Y.

I want the proof that your system of "Dynamic Tension" can help make me a New Man—give me a healthy, husky body and big muscle development. Send me your FREE book, "Everlasting Health and Strength." No obligation.

Name .....
(Please print or write plainly)

Address .....

City ..... State.....

One LIFE INSURANCE POLICY INSURES YOUR ENTIRE FAMILY!

TOTAL COST

Only $1 A MONTH

PAYS FOR ALL

INSURES PARENTS, CHILDREN (Married or Unmarried) BROTHERS, SISTERS and GRANDPARENTS . . . Ages 1 to 65

★ Now, modern life insurance methods make it possible for *all* of your family, including in-laws, to be insured in one policy paying guaranteed benefits for death from any cause.

Instead of issuing five or six policies to include mother, father, sons and daughters, even grandparents, we now issue just one policy that insures them all . . . and at one low cost price of only $1.00 a month.

Guarantee Reserve

FAMILY POLICY

INSURES FROM 2 to 6 MEMBERS OF YOUR FAMILY

$1,422.00 For Natural or Ordinary Accidental Death

$2,844.00 For Auto Accidental Death

$4,266.00 For Travel Accidental Death

The figures shown above represent the insurance provided by the policy on a typical average family of five persons.

GUARANTEE RESERVE LIFE INSURANCE COMPANY
DEPARTMENT 17-A, HAMMOND, INDIANA

NO AGENT WILL CALL
10-DAY FREE INSPECTION OFFER
SEND NO MONEY

COMPUTED ON LEGAL RESERVE BASIS

To guarantee payment on each death that occurs in your insured family, we have figured this policy out on the strict legal reserve basis, complying with State government requirements in every respect. This is your assurance of *Cash When You Need It Most.* Claims are paid at once . . . without argument or delay. State records verify our fair and just settlements.

Guarantee Reserve specializes in full family coverage, that's why we can offer safe, guaranteed life insurance on your whole family at one low price of only $1.00 a month.

NO MEDICAL EXAMINATION

To eliminate costly doctor fees, etc., we have eliminated Medical Examination. All people from age 1 to 65, in good health may be included in this new type Guarantee Reserve family policy. No membership fees, no examination fees, no *policy* fee . . . $1.00 a month pays for one policy that insures all.

RUSH—MAIL AT ONCE—DON'T DELAY

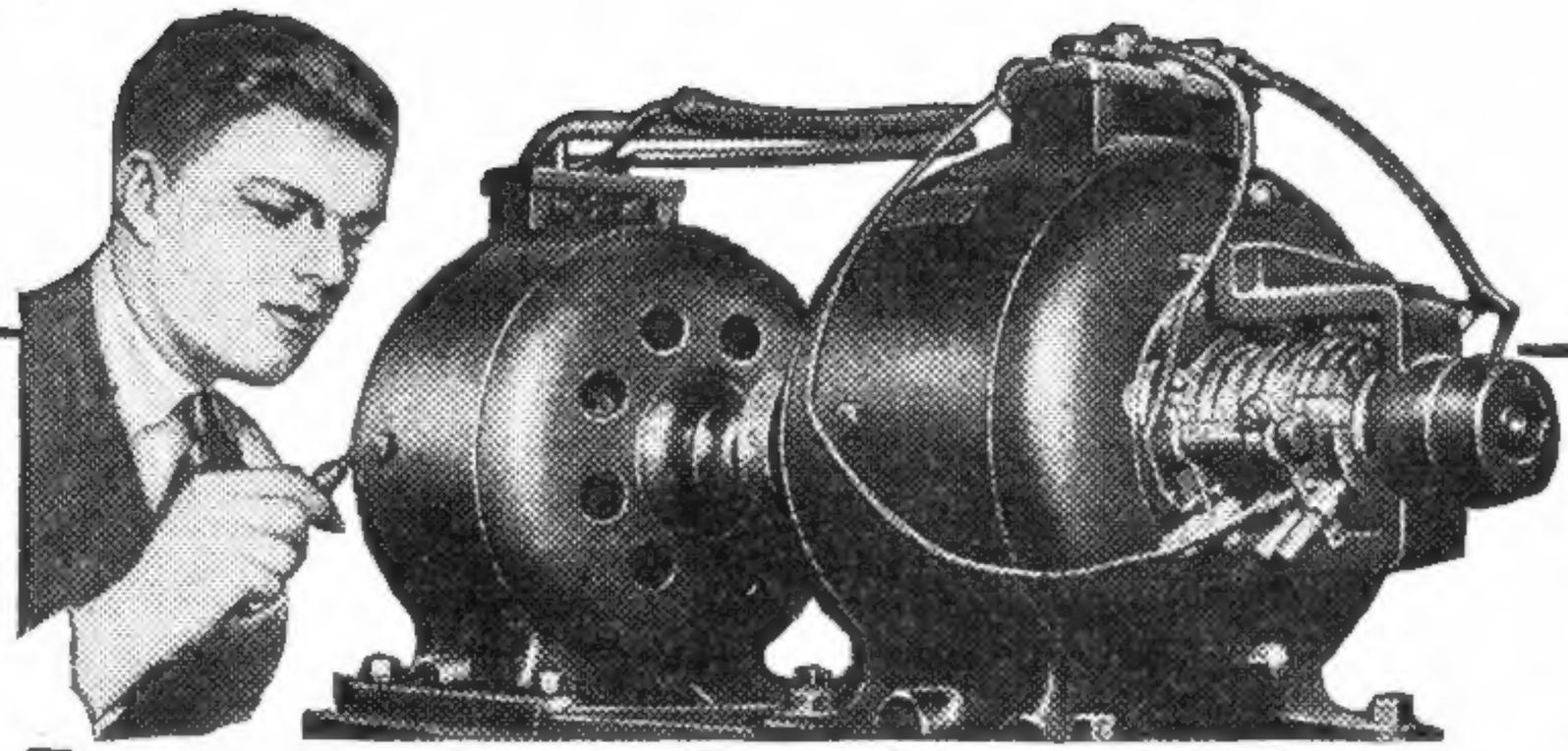
Guarantee Reserve LIFE INSURANCE CO.
GUARANTEE RESERVE BLDG., Dept. 17-A, Hammond Ind.

Gentlemen: Without obligation, please send me at once complete information on how to get your Family Life Policy for FREE inspection.

Name .....

Address .....

City ..... *State* .....



Amazingly Easy Way to get into ELECTRICITY

I'LL FINANCE YOUR TRAINING

Don't spend your life hoping for a better job and a better salary. *Let me show you how to train for positions that lead to $35.00, $40.00 a week and up in the great field of Electricity.* NOT by correspondence but by actual shop work right on real electrical machinery. Then on my "PAY AFTER GRADUATION" PLAN YOU CAN PAY YOUR TUITION AFTER YOUR TRAINING PERIOD IS OVER IN EASY MONTHLY PAYMENTS.

Learn Without Books in 90 DAYS

Lack of experience—age, or advanced education bars no one. I don't care if you don't know an armature from an air brake—I don't expect you to! It makes no difference! Don't let lack of money stop you. Most of the men at Coyne have no more money than you have. That's why I have worked out my astonishing offers.

Earn While Learning

If you need part-time work to help pay your living expenses I'll help you get it. Then, in 12 brief weeks, in the great roaring shops of Coyne, I train you as you never dreamed you could be trained...on one of the greatest outlays of electrical apparatus ever assembled . . . real dynamos, engines, power plants, autos, switchboards, transmitting stations...everything from doorbells to farm power and lighting . . . full-sized . . . in full operation every day!

PREPARE FOR JOBS LIKE THESE

Our Employment Bureau for graduates gives FREE lifetime employment service.

Armature Winder
Sub-Station Operator
Auto & Aviation Ignition
Maintenance Electrician
Service Station Owner
Air Conditioning
Electric Refrigeration
Radio Servicing
and many others

we help to make you a master electrician so you can cash in on the opportunities ahead.

Jobs, Pay, Future

To get a good job today you've got to be trained. Industry demands men who have specialized training. These men will be the ones who are the big-pay men of the future. After graduation my Employment Department gives you Lifetime Employment Service. J. O. Whitmeyer says: "After I graduated, the School Employment Service furnished me with a list of several positions . . . I secured a position with an Electrical Construction Company paying me 3 to 4 times more a week than I was getting before I entered Coyne and today I am still climbing to higher pay."

Get the Facts

Coyne is your one great chance to get into electricity. Every obstacle is removed. This school is 40 years old—Coyne training is tested and proven. You can get training first—then pay for it in easy monthly payments after you graduate. You can find out everything absolutely free. Simply mail the coupon and let me send you the big, free Coyne book ...facts...jobs...salaries...opportunities. This does not obligate you. So act at once. Just mail coupon.

Get this FREE Book

No Books—No Classes

No dull books, no baffling charts, no classes, you get individual training . . . all real actual work . . . building real batteries . . . winding real armatures, operating real motors, dynamos and generators, wiring houses, etc., etc. That's a glimpse of how

THE HOME OF COYNE

This is our fireproof, modern home wherein is installed thousands of dollars' worth of the newest and most modern Electrical equipment of all kinds. Every comfort and convenience has been arranged to make you happy and contented during your training.

COYNE ELECTRICAL SCHOOL
H. C. Lewis, Pres., Dept. 12-84
500 S. Paulina St. Founded 1899 CHICAGO, ILL.

H. C. LEWIS, Pres.
COYNE ELECTRICAL SCHOOL, DEPT. 12-84
500 S. Paulina Street, Chicago, Illinois

Dear Mr. Lewis:
I'm really in earnest. I do want to get ahead. Send me your big free catalog with full particulars about Coyne training and your plans to help a fellow, who hasn't a lot of money, to get ahead.

Name.....

Address.....

City.....*State*.....

WITHOUT going into a tailspin of panegyrics or some of that dizzy space port philosophy to lead up to the announcement of next issue's novel, the old sarge is just going to pull on a pair of asbestos gloves and ladle the news out to you hot, and let the molten metal splash where it will.

You space bugs are going to get the dangest "absolute ruler" working over you've had in many a day. It will be worse than the Kartov Military System of Mercury in the twenty-ninth century, Earth time computation. Don't go away. Take your hands off those rocket blast studs! This isn't going to be just another dictator yarn. In "Tarnished Utopia" the author, Malcolm Jameson, precipitates his hero into the most gosh-awful setup in a world of the future that makes everything printed heretofore quite mild and idyllic by comparison.

Not satisfied with presenting a picture of Earth in chains, Jameson takes in the Moon as a prison colony. Then, just for a bit of choice dessert, he grabs up a typewriterful of weird flora and fauna and puts them to work as slaves of the czaristic regime.

The hero makes his debut as a criminal of the worst class—according to the despotic sovereign—and proceeds to work his way down from there. I'm telling you it's a nightmare of deprivation and hardship which makes Devil's Island seem the headquarters for the SPCA. No fooling, the old sarge has been around, and I never saw anything like it outside of the time I had the XT's (Xeno Tremens) on Neptune.

Tell you more? Yeah—next issue Swami Saturn reveals all. Just see to it that you're aboard when Pilot Jameson blasts off for "Tarnished Utopia" on the next trip. For your special information, Malcolm Jameson is a retired naval officer. He takes his knowledge of war and implements of war and blends them with a virile imagination—and zowie! He has even your old space dog flattened out against the acceleration pad.

Read "Tarnished Utopia," and you'll have the effect of having made a special voyage with the old Sarge, Jules Verne, Gerry Carlisle and Frank Buck. I couldn't tell you a stranger story in a Martian space port with a gallon jug of Xeno at my elbow.

HALL OF FAME CLASSIC

And when you catch your breath from that novel, sharpen your eyeteeth on the HALL OF FAME CLASSIC selected for the same issue. HORNETS OF SPACE, by R. F. Starzl , is a gem of a little tale that—but why waste words eulogizing something that speaks for itself? More fuel in the left-hand bank of rockets, and let's be off for that regular battle of the space-warps with you slap-happy kiwis.

And, before we blast down through the spindle of ethergrams, I repeat, how about you space-bugs writing in and voting for a HALL OF FAME story? My offer of a one-hundred-word letter to be printed for the winner still goes. So, shoot in your selection of a classic—and tell me why.

ETHERGRAMS

For a change, this trip starts off as a regular routine flight—no special announcements, no monkey business, no crackpots. I have here an interesting note from Author-Pilot Henry Knuttner who tuned in on STARTLING STORIES in time to catch "The Bottom of the World" by the Burroughs boys. And Hank sent along a clipping from a California newspaper. Here it is:

BEANS CONTINUE GROWING WHEN LAND SINKS 30 FEET

Oceanside, Cal.: A large area planted to beans on a farm near here sank 30 feet below the normal land level in two weeks. In spite of the phenomenon, the crop was not affected

How's that for truth becoming almost as strange as fiction? I remember once while I was making a trip across the Stygo Marsh on Venus when one of my gravity mud shoes conked out and— All right, all right! Cut out that electro-magnetic howler. I wasn't going to tell it, anyway.

Let's look on the ethergram spindle. Well, wet my fuse and call me fizzle, if here isn't a gal pilot signaling from out Wisconsin way. Come on in, honey.

SWOONING HEROINES

By Flora Belle Mitchell

Here's the report on the last three issues.

"The Gateway to Paradise" was one of the best stories I have read for a long time. The Burroughs brothers certainly are competing with their famous father with "The Bottom of the World," which was also very good. I hope we can have them again very soon. The best, however, was "The Gods Hate Kansas," one of the best stories I have ever read. The Hall of Fame stories need no criticism; they're always good.

I have only one fault to find with all the authors. The heroine swoons—and the hero rushes in to save her from the clutches of the power-crazed villain scientist. One really gets tired of this sort of thing. Can't we have some real flesh and blood heroines? I would like it, and I'm sure the rest of the girls would, too.

Your preview of the coming story sounds good, although I'm going to supply myself with a pair of absestos gloves before getting my copy of STARTLING STORIES.

On the whole, your magazine is the best out THRILLING WONDER STORIES is also a very good mag. Perfection comes only with age, however

My rocket jets sound weak, so I'll have to refuel. Signing off for now. Oh, say—how can I get information about conventions and clubs that are in the northwestern state - - River Falls, Wis.

All right, you dizzy Paul Bunyans of space, who's going to supply Flora Belle with this information of the Northwest? Seems to me I haven't heard much of late from Science Fiction League chapters in that neck of the woods. As for the swooning heroine, gal, you ought to meet up with some of those hardy femmes of Titan. They'd make the Amazons look like sissies. Or maybe some of our authors ought to meet up with them, says you. Anyway, I won't argue with you. I've got trouble coming up now over departments. Read what this space rat says.

DEPARTMENTAL BEEF

By Norman Hempling

I might as well tell you right now that I am a new fan of our mag. But why talk about me when there is so much to say about the mag?

The first thing on the list is the story. (The reason I say story instead of stories is this, only the feature novel is worthy of mention.) That booklength novel by Joseph J. Millard is a super wooper duper. I mean none other than "The Gods Hate Kansas." It was such a superbly woven yarn that it rates with me as good as "The Magician From Mars" did, which was one of the best Captain Future Stories. While I'm on the subject of stories, how about doing something with those short stories? They were simply terrible

Well, if Keller, Bloch and Broome can't do better, why don't you get Binder, Wilcox, Hamilton and Hasse, who I am sure can do better?

Next on the list is the ills which were just lousy. The guy Belarski is just no good Why you call that a cover! To me it looks more like kindergarten's work. Why, those pics of Wesso's look more like a mass of paints with a human here and there. Both Morev and Paul ought to be ashamed of themselves for such work.

I am now proceeding to get down on my hands and knees begging you to get Bok, Krupa, Fuqua, Finlay and Lynch. Please take out some of that advertisement or enlarge the mag. As to the monthly question—absolutely no

Your departments are third on my list I rate them in the following order. One: The Ether Vibrates—second best letter dept in the s f field. Two: Science-Question Box—just okay. Three: Review of Fan Pubs a very clever idea. Four: Thrills of Science—Cut it out!

Well here's to a lot of success.—2302 Ave. O, Brooklyn, N. Y.

(Continued on page 120)

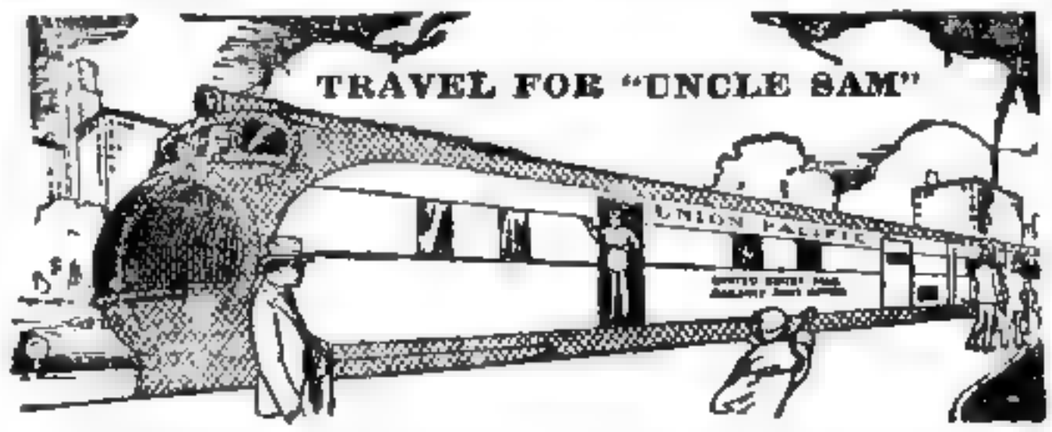
WORK FOR THE GOVERNMENT

START $1260 to $2100 Year

Prepare NOW for 1942 Examinations

Railway Postal Clerks

Railway Postal Clerks get $1,900 the first year regular, being paid on the first and fifteenth of each month. ($79.17 each pay day.) Their pay is automatically increased yearly to $2,450. Advance may be had to Chief Clerk at $2,700 a year. ($112.50 each pay day.) Age 18 to 35.



3 Days On --- 3 Days Off --- Full Pay

Railway Postal Clerks on long runs usually work 3 days and have 3 days off duty or in the same proportion. During this off duty their pay continues just as though they were working. They travel on a pass when on business. When they grow old, they are retired with a pension.

City Mail Carriers, Post Office Clerks

Clerks and Carriers now get $1,700 the first year on regular and automatically increase $100 a year to $2,100 and $2,300. Age 18 to 48.

Ass't Statistical Clerk

Open to Men — Women 18 to 50 Entrance salary $1,620 year Appointments as Ass't Statistical Clerks and Clerks in the Departments at Washington, D C and elsewhere, are made from this examination.

Many Other Positions

Many other positions are obtainable. Those wishing these positions should qualify at once.

Get Free List of Positions

Fill out the following coupon. Tear it off and mail it today—now, at once

This investment may result in your getting a big-paid government job.

FRANKLIN INSTITUTE, Dept. D-258, Rochester, N. Y.

Rush to me, entirely free of charge (1) a full description of U. S. Government Jobs; (2) Free copy of illustrated 32-page book, "How to Get a Government Job"; (3) List of U. S. Government Jobs; (4) Tell me how to qualify for a U. S. Government Job.

Name .....

Address .....

Use This Coupon Before You Mislay It. Write or Print Plainly

1/3 MFRS. ORIG. PRICE

GENUINE *Late Model No. 8*

L.C.SMITH

was $102.50

NOW $34.85 CASH

only **70c** *a week*

While 297 Last!

or Buy on EASIEST TERMS

Buy direct from us at about 1/3 mfrs. orig. price and save over $60.00! Beautifully rebuilt and unconditional 2 yr. guarantee. No down payment necessary — 10 day Trial. *Hurry only 297 at this price!*

NO MONEY DOWN
10 DAYS' TRIAL
Easy Terms—10c a day

No obligation. Send no money. See before you buy on wide open 10 day Trial. Pay only 10c a day. You get this genuine late office model L. C. Smith beautifully rebuilt with all standard improvements: basket shift, standard 84-character, 4 row keyboard, shift lock key, back spacer, 2 color ribbon, ribbon reverse, stencil cutting device, tabulator, etc. Ball Bearing throughout — quiet operation. THOUSANDS PAID $102.50 — IT'S YOURS FOR ONLY $34.85 (CASH PRICE). No risk, money back guarantee.

2 YEAR GUARANTEE

Our 2 year ironclad guarantee is your assurance of satisfaction and long service! Our 30 years of Fair Dealing Backs This Guarantee.

IDEAL FOR HOME OR OFFICE

This late L. C. Smith with basket shift is the machine used by schools, large corporations and business houses the country over. The perfect, all purpose typewriter for correspondence, office work, billing, manifold work etc. Has all modern improvements you need, stands hard service — IT'S YOURS AT ONLY $3.00 A MONTH.

WIDE CARRIAGE MODELS

Wide carriage L. C. Smiths for government reports, large office forms, billing, etc. The 14 inch carriage takes paper 14" wide, has 12" writing line—only $5.00 extra with order. The 18" takes paper 18" wide, has 16" writing line—only $5.00 extra with order. (See coupon.)

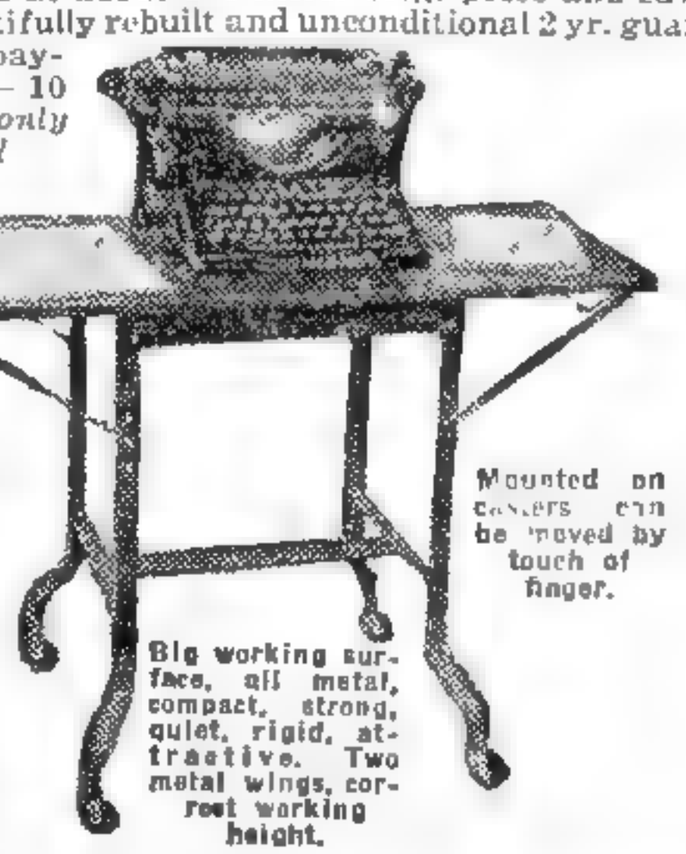
INTERNATIONAL TYPEWRITER EXCHANGE
231 West Monroe Street Dept. 188, Chicago, Illinois

EXTRA VALUE

ROLL-A-WAY SECRETARIAL

TYPEWRITER STAND

For those who have no typewriter stand or handy place to use a typewriter, I make this special offer. This attractive stand that ordinarily sells for $4.85 can be yours with L. C. Smith for only $3.00 extra—payable 25c a month. *Quality built. Just note all its convenient features.* (See coupon.)


Mounted on casters can be moved by touch of finger.
Big working surface, all metal, compact, strong, quiet, rigid, attractive. Two metal wings, correct working height.

FREE

COMPLETE TOUCH TYPING COURSE

We give FREE with your L. C. Smith a complete 9 lesson Home Study course of Famous Van Sant Touch Typing system. You can now learn typing quickly and easily.

OFFER FOR LIMITED TIME—SEND COUPON TODAY

Accept this wide open offer now! Send no money. Use L. C. Smith for 10 day trial in your home. Return it if you don't think it the greatest value you have ever seen. If you buy, pay on easiest terms—only $3.00 a month. 2 yr. ironclad guarantee. **Avoid disappointment—mail coupon today.**

MAIL THIS COUPON

INTERNATIONAL TYPEWRITER EXCHANGE,
Dept. 188, 231 W. Monroe St., Chicago, Ill.

Send me L. C. Smith (F.O.B. Chicago) for 10 days' trial. If I keep it I will pay $3.00 per month until easy term price ($38.85) is paid. If I am not satisfied I can return it express collect.

☐ 10" carriage ☐ 14" carriage ($3.00 extra) ☐ 18" carriage ($5.00 extra)
☐ Check for typewriter stand ($3.00 extra payable 25c a month). Stand sent on receipt of first payment on L. C. Smith.

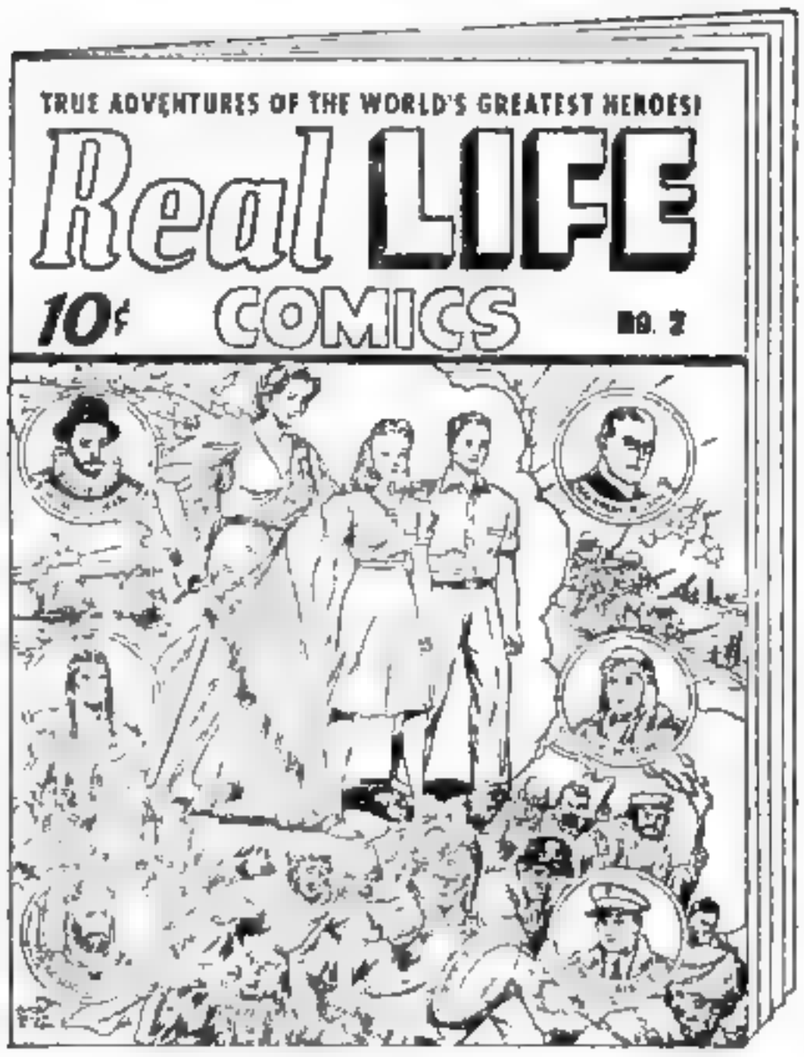
Name ..... Age.....
Typewritten signatures not acceptable

Address .....

City ..... State .....
CAUTION—For Quick Shipment Give Occupation and Reference

OVER 200,000 SATISFIED CUSTOMERS ALL OVER THE WORLD.

It's New!
It's True!
It's Thrilling!



The Most Amazing Comics Magazine of Them All—Featuring True Stories of the World's Greatest Heroes!

64 PAGES OF TRUE AND GRIPPING ACTION!

An Inspiration to American Youth!

Real LIFE COMICS

Only 10c Everywhere

Okmulgee, Okla.
Hazelton, Pa.
Des Moines, Iowa
Sioux City, Iowa

Look Men!

Here's a Partial List of States, Cities and Institutions in which GRADUATES of I. A. S. were placed in positions as Finger Print Experts!

Be A Secret Service and Identification Expert!!

State of Wash.	Calgary, Alta., Can.	Miami, Florida
State of Michigan	Houston, Texas	Orlando, Florida
State of Utah	Waterloo, Iowa	York, Pa.
State of Ohio	Victoria, B. C.	El Paso, Texas
Duluth, Minn.	Baton Rouge, La.	Everett, Wash.
Detroit, Mich.	Atlantic City, N. J.	Schenectady, N. Y.
Pueblo, Colo.	E. Lansing, Mich.	Alhambra, Calif.
Idaho Falls, Idaho	Globe, Arizona	Livingston, Mont.
Ogden, Utah	London, Ont., Can.	Saginaw, Mich.
Lorain Co., Ohio	Henryetta, Okla.	Fort Collins, Colo.
St. Paul, Minn.	Seattle, Wash.	Bedford, Ohio
Pittsburgh, Pa.	Ferndale, Mich.	Huntington, W. Va.
Lincoln, Nebr.	McAlester, Okla.	Salt Lake City, U.
Birmingham, Ala.	Negaunee, Mich.	Taft, California
Columbus, Ohio	Lawton, Okla.	Jamestown, N. Y.
Havana, Cuba	Crown Point, Ind.	Phoenixville, Pa.
New Haven, Conn.	Bay City, Mich.	Rochester, N. Y.
Great Falls, Mont.	Roanoke, Va.	Media, Pa.
Galveston, Texas	Glendale, Calif.	Dayton, Ohio
Pensacola, Fla.	Hawaiian Islands	East Chicago, Ind.
Stillwater, Okla.	Drumright, Okla.	Green Bay, Wis.
		Nocona, Texas
		Neenah, Wis.
		Kingfisher, Okla.
		Centralia, Wash.
		Bismarck, N. D.
		Bloomington, Ind.
		Cuyahoga Falls, O.
		Rock Island, Ill.
		Philadelphia, Pa.
		Astoria, Oregon
		Pendleton, Ind.
		St. Joseph, Mo.
		State of Illinois
		State of Iowa
		State of Idaho
		State of Colorado
		Lima, Ohio
		Selma, N. C.

Want a Regular Monthly Salary?

Investigate this opportunity to earn a regular monthly salary and share in Rewards. You will receive the same course as our hundreds of graduates who are *now* holding positions in the partial list of States, Cities and Institutions shown here. And one to fifteen I. A. S. Graduates are employed on regular monthly salaries by each bureau listed. Be a Finger Print and Secret Service Operator! Write for Free details how you can train at home in spare time to enter this young, swiftly-growing profession.

FREE ***The Confidential Reports Operator No. 38 Made to his Chief!***

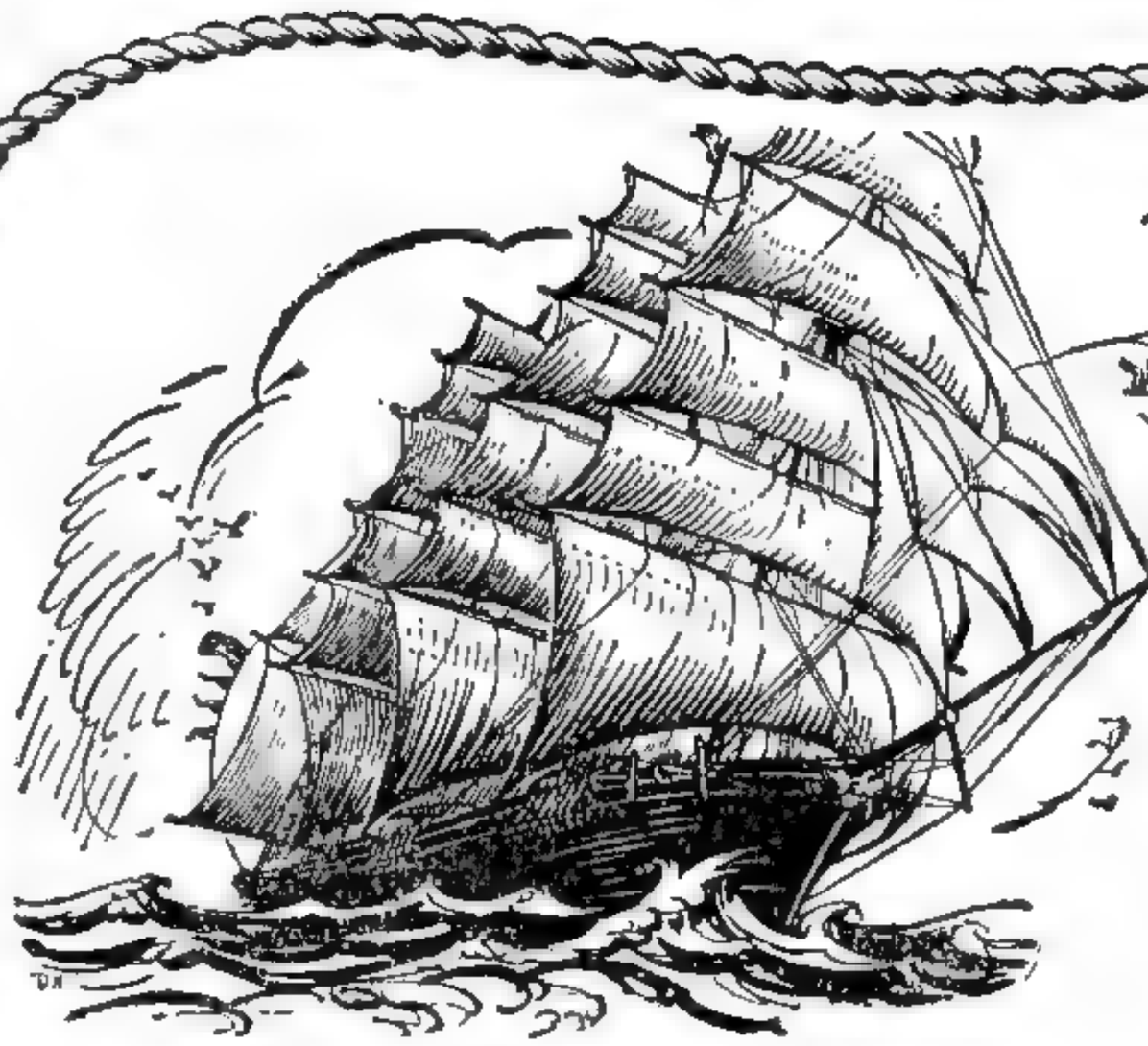
Write or send coupon for Free Reports and Illustrated Finger Print Book . . . the same information requested by *hundreds* of I. A. S. graduates now earning a monthly salary!

Institute of Applied Science, Dept. 7961
1920 Sunnyside Ave., Chicago, Ill.

Gentlemen:—Without any obligation on my part whatever, send me the Reports of Operator No. 38, also your illustrated Free Book on Finger Prints and your low prices and Easy Terms Offer. Literature will be sent only to persons stating their age.

Name----------

Address---------- *Age*----------

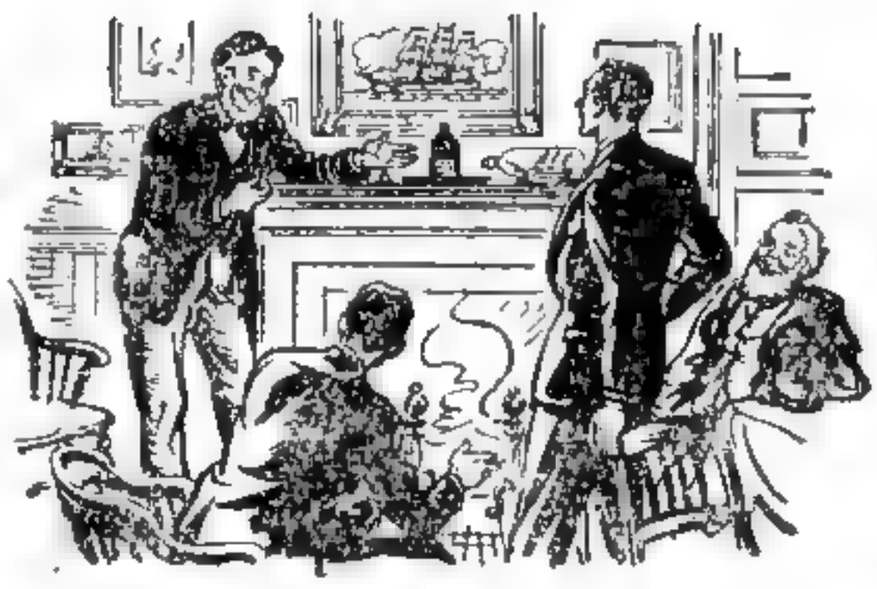


THE "GREAT REPUBLIC"... 4,555 tons...the largest ship in the world in 1853! Captains of ships like this often carried kegs of whiskey on every voyage. They knew the billowing ocean "rocked" whiskey to smoother flavor.

Old Mr. Boston says:

"From Sea-Rocked whiskeys of Old came my inspiration for Rocking Chair!"

BACK HOME IN PORT, these seafaring men still "rocked the keg" under porch rockers. Down Cape Cod way, Mr. Boston heard tales of these grand old "rocked" whiskeys . . . got the idea for mellow, richer Rocking Chair!



TODAY—YOU'LL DISCOVER in Rocking Chair a smoothness worthy of the finest wave-rocked whiskeys of old! Because Old Mr. Boston recaptures that flavor by *controlled agitation in his special blending process.*

MR. BOSTON

ROCKING CHAIR

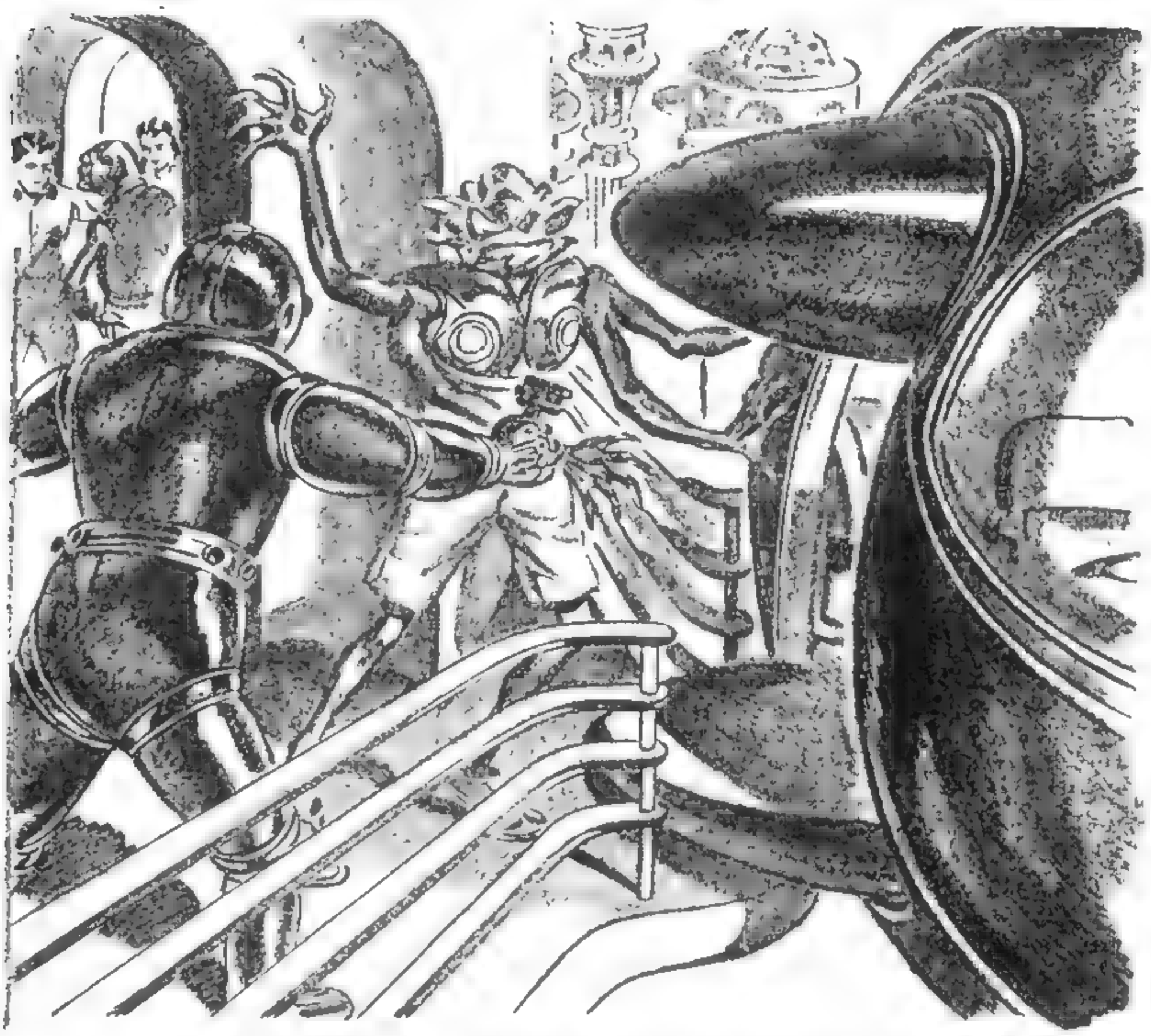
BLENDED WHISKEY

85 Proof • 75% Grain Neutral Spirits • Ben-Burk, Inc., Boston, Mass.

DEVIL'S PLANET

By MANLY WADE WELLMAN

Author of "Island in the Sky," "Sojarr of Titan," etc.



"Help!" Girra called "My rrobot hass gone out of contrrol!" (Chap. X)

CHAPTER I

Water, Water—Nowhere

YOUNG Dillon Stover woke easily and good-humoredly, as usual. He knew he was in bed, of course—but was he? He felt as though he were floating on a fleecy cloud, or something.

He stretched his muscular long legs and arms, yawned and shook his tawny-curled head. He felt light as a feather, even in the first waking moment. He was alert enough to remember now. This was Mars, where he weighed only forty percent of what he weighed at home in the Missouri Ozarks. He'd come here to carry on the scientific labors of his late grandfather, which labors he'd inherited along with old Dr. Stover's snug fortune. For the first time in his life Dillon Stover had fine clothes,

independence, money in his belt-pouch—and responsibility.

That responsibility had brought him to Pulambar, Martian City of Pleasure, for study and decision.

He sat up on the edge of his bed, looking around the sleepiing room. Its walls were of translucent stuff like ground glass. Upon them, delicate as dim etchings, rippled a living pattern of leaves and blossoms that waved in the wind—a sort of magic-lantern effect from within, he decided. Such leaves and blossoms had once existed on Mars, long ago before the planet began to dry and choke with thirst.

Somebody looked in. It was Buckalew, his grandfather's old friend, to whose care Dr. Stover had entrusted his grandson's Martian wanderings in a posthumous letter of introduction.

Robert Buckalew was a man of ordinary height, slender but well proportioned, with regular, almost delicate features that seemed never to change expression. Like most society sparks whose figures were not too grotesque, he wore snugly tailored garments and a graceful mantle. He looked very young to have been a friend of Stover's grandfather. His dark hair was ungrayed, his expressionless face unwrinkled. What kind of man was Buckalew? But Dr. Stover had died—suddenly and without indication of the need to die—and his grandson must trust to that letter of introduction.

"Good morning," Buckalew greeted Stover. "Good afternoon, rather, for it's a little past noon. Sleep well?"

Again the young man from Earth stretched, and stood up. He was taller than Buckalew, crawling with muscles. He grinned, very attractively.

"I slept like a drunkard without a conscience," he said. "That flight in from Earth's tiring, isn't it? When did I get here? Midnight? Thanks for taking me over like this." He glanced around. "Am I in some de luxe hotel?"

"You're in my guest room," replied Buckalew. "This is a tower apartment. I'm in what they call the 'High-tower Set', living 'way above town. Come to breakfast."

THE meal was served in the parlor, a dome-ceilinged chamber with rosy soft light and metal chairs that were as soft as the bed had been. Or was that more Martian gravity? The servant was a clanking figure of nickeled iron with jointed arms and legs and a bucketlike head with no face except a dimly glowing light bulb. Stover had seen few robots at home on Earth, and he studied this one intently.

"A marvelous servant," he commented to Buckalew as the metal creature went kitchenward for more dishes. "I've never been served better."

"Thank your grandfather," replied Buckalew, who was not eating, perhaps having had a meal earlier. "Dr. Stover made all these very successful machine-servitors now in use throughout Pulambar."

Stover had heard that. But his grandfather had ceased his robot building long ago. Why? Perhaps it was because his latest work, the problem of the Martian water shortage, had absorbed him.

"They aren't exactly alive, are they?" the young man asked Buckalew.

Buckalew's dark head shook, rather somberly. "No. They're only keyed to limited behavior-patterns. This one is good for personal service, others as mechanics' helpers, some of the best as calculators or clerks. But—" He broke off. "Where do you want to go first? I'm at your service, Dillon."

Stover wiped his mouth. "I suppose that business had better come before any pleasures. I'm here to look at

Is Plunged Into a Mystery on Mars!

drought conditions. Can you help me there?"

"Of course." Buckalew went to a wireless telephone instrument at the wall. "Short-shot rocket," he ordered into it, and led the way out upon the front balcony.

By bright daylight Stover now saw Pulambar spread far below the tower in which Buckalew lived.

Martians built Pulambar long ago at the apex of that forked expanse of verdure called Fastigium Aryn by Earth's old astronomers. Their world

with an Intrepid Earthman as Your Guide!

was dying in spite of science and toil, and in a pleasure city the doom might be forgotten. Pulambar had its foundations in the one lake left on Mars—canals for streets, open pools for squares, throngs of motorized gondolas and barges.

This was all the more wondrous since the rest of the planet fairly famished for water. Above towered cliff like buildings of every bright plastic material, rimmed with walks, strung with colored lights, balconied with gardens, spouting music and glare and gaiety, and crowded with tourists of all kinds and from all planets. If the laughter was a trifle hysterical, so much the better.

Above this massed roar and chatter rose towers and spires from the blocky masses of buildings. Here was Pulambar's upper segment — Tower Town, where wealth and society reigned. A world of its own, as Stover saw it, the highest peaks a good two miles from ground level and strung together with a silvery web of wire walkways and trolley tracks. Independent of the coarser turmoil below, it needed no such turmoil, having plenty of its own. It had its own law, sophistication; its own standard, glitter; its own ruler, bad but brilliant, Mace Malbrook.

Of all these things Stover had only dreamed in the simple and sober surroundings of his boyhood. Orphaned at six, he had gone to dwell with his grandfather, the doctor, at the laboratory farm in the Ozarks. Study, exercise, health — all those his grandfather had supervised, making him into a towering athlete and something of a journeyman scientist. But the old man had always discouraged long jaunts even to such places as St. Louis, the World Capitol, let alone to other planets. Well, thought Stover, he was able all the better to savor the excitement of the great Pleasure City of Mars.

"I'm certainly pro-Pulambar," he said to Buckalew, and he meant it.

"Here's our rocket cab," replied Buckalew, as a cartridge-shaped vehicle swam to the balcony railing. They entered the closed passenger compartment at the rear. "Tour us over the desert," Buckalew ordered the pilot through a speaking tube.

AWAY over the complex glitter of Pulambar they soared, turning their stern-blasts to the fork of scrubby vegetation that cuddled the lake-based city. Beyond and below Stover could see the desert, rusty red and blank.

"Looks as if it needs a drink bad," he said to Buckalew. "No wonder nobody lives in it."

"Oh, people live in it," surprisingly replied Buckalew. "Martians aren't as numerous as Terrestrials, but there's not enough good land for what there are." Again he addressed the speaking tube: "Pilot, go lower and slower."

The rocket dipped down. Stover could see the desert features more plainly, dunes, draws, expanses of red sand.

Buckalew pointed.

"You see that dark blotch like mold down there?" he asked. "It's a sign of life. Set us down by that hutch, pilot."

A minute later the cab dropped gently to the sand. Buckalew and Stover emerged.

Stover looked curiously at the blisterlike protuberance a few yards away. It rose perhaps five feet from the sand, and was twice that in diameter. At first sight it seemed of dull dark stuff, but then he saw that it was a semi-transparent shell, with clumpy vegetation inside.

"Come close," said Buckalew, and they walked up to the blister. "This is the desert camp of a Martian."

Inside the hummock grew a single bush or shrub. Its roots were deep in the sand, its broad-leafed branches spread out inside the shell to receive the sunlight.

Beneath those branches sprawled what looked something like four big, limp spiders.

"Martians," said Buckalew.

Stover stared. The few Martians he had seen on Earth wore braces and garments to hold them erect in semi-Terrestrial posture. These, naked and unharnessed, showed as having soft bladder-bodies, each with six whip-

like tentacles. Their heads, pink and covered with petal-like sense organs, all turned close to the big shrub. Stover saw that each of the Martians held a long pipe or tube in its tentacles, one end in the mouth orifice among the face petals. The other end of the pipe quested among the leaves of the shrub.

"They are probing for water to keep them alive," Buckalew explained.

Then Stover understood. The shrub's roots, deep and wide in the sand, drew to themselves all surrounding moisture. It concentrated in the leafage, a droplet at a time. These wretched creatures sealed the plant in lest the precious damp be lost by evaporation.

"Martians make such enclosures from the glassy silicates in the sand," Buckalew was saying. "A Martian doesn't need much food—a few ounces of concentrate will last for ever so long. What they need is a little water, and the plant can give that for a time."

"For a time?" repeated Stover, staring again. "What happens when the plant's water-production gives out?"

"The Martians die."

"That must happen pretty often," said Stover soberly, unconsciously quoting *Through the Looking-Glass.*

It may be that Buckalew was deliberate in rejoining, from the same work:

"It always happens."

HE STEPPED close to the sealed shelter, tapping on it with his knuckles. A Martian wriggled toward them. Buckalew held up something he had brought in the rocket—a clayware water jug, stoppered carefully, holding about two quarts. The Martian inside made frantic, appealing gestures.

Buckalew set the jug close to the foot of the glass wall, and the Martian burrowed quickly under, snatching it.

Stover turned away, almost shuddering, from the sight of all the creatures crowding around that pitiful container of water.

"We go back now," said Buckalew, and they re-entered the cab.

Stover was somewhat pale under his healthy skin.

"This is ghastly," he said at last. "They have to suck up to that poor plant—ugh!"

"That is but one little encampment of many such," Buckalew told him. "Shall we stop at the fringe of Pulambar when we go back? To see the water-lines?"

"Water-lines?" repeated Stover. "Are they like bread-lines used to be on Earth?"

"Very much like that. Long processions of wretched poor, coming to get half-pint rations."

"I don't want to see that," Stover told him. "Let's get back to something gay."

"Back to my apartment," Buckalew told the pilot. To Stover he said: "We'll visit the Zaarr tonight—best public house in Pulambar."

CHAPTER II

Martian Holiday

ZAARR, in the slurring language of Mars, means Unattached. The public house mentioned by Buckalew was almost what the name implied—a dome-shaped edifice of silvery alloy, floating at a fixed point among four tall towers. From each tower flashed a gravity-lock beam, like an invisible girder, to moor the Zaarr in space. The only way there was by heliocopter, short-shot rocket, or other sky vehicle.

Admission was by appointment, costing high.

The table of Stover and Buckalew was at the raised end of the inner hall. Below them, the crystal floor revealed the pageant of Pulambar's lower levels a mile below. A Terrestrial orchestra, best in the Solar System, played in a central pit while brigades of entertainers performed. Over all, at the highest point of the dome, hung a light that changed tint constantly, a Martian "joy-lamp" whose rays brought elevated visions to Martians, and sometimes madness and violence to Terrestrials.

It would have been more of a treat

to Stover if he hadn't kept remembering that other dome-shaped structure he had seen earlier where four wretched Martian paupers prisoned themselves to suck miserable life from the distillations of a poor plant. Again he wanted to shudder, and beat down the impulse. He was here to enjoy himself. Pulambar was the most exciting spot in the habitable universe, and the Zaarr it's greatest focus of fun.

HE CONTRASTED all this with his familiar Ozark home, white utilitarian walls, laboratory benches and surrounding greenery, inhabited by sober technicians and caretakers. In the changing joy-light, the guests seemed the more exotic and picturesque, clad in all colors and richnesses, their hair—male and female—dressed and curled and often dyed with gay colors.

No hysterical howl at the Zaarr. Here was society, restrained even under the joy-lamp. Most of them were Terrestrials or Terrestrial-descended Jovians, for such had most of the money in the System. There was just a sprinkling of Venusians, and the only Martian anywhere in sight was the proprietor, Prrala, over by a service entrance.

The attendants were robots, great gleaming bodies with cunning joints and faces blank save for round white lamps.

To Dillon Stover, who had never seen such things, they looked like animated suits of ancient armor.

"Intriguing to notice," he said to Buckalew in his gentle voice, "how, after so many millennia, people still turn to the same basic items of entertainment—sweet sounds, stimulating drink or other narcotics, palatable food, and parades of lovely girls." He eyed with mild admiration the slim, tawny young woman who stood on the brink of the orchestra pit and sang a farce novelty number about a rich man who was sick.

"That entertainer," commented Buckalew, "might fit as well into an ancient Roman banquet scene, a tournament of song in old Thuringia, or the New York theatrical world of the twentieth century. There's been nothing new, my young friend, since the day before history's dawn."

Stover looked at the girl with more interest. He replied only because Buckalew seemed to expect some sort of a reply.

"That's new, to me at least," he argued, jerking his head toward the joylamp. It shot a sudden white beam to light him up, and he was revealed as easily the handsomest man of all those present.

Even sitting, he showed great length and volume of muscle inside his close-fitting cloth of gold. His hair, shorter than fashionable, gleamed only less golden than his tunic.

His young face was made strong by the bony aggressiveness of nose and jaw. His intensely blue eyes carried the darkly glowing light of hot temper in them.

"I'm trying not to let that lamp stir me up too much," he went on. "It seems to intoxicate everybody except you."

"I'm saturated," retorted Buckalew. "Well, how will you like to go to work when this holiday's done?"

"Let work be left out of the present conversation," Stover pleaded. "I want complete relaxation and excitement. Tomorrow I'll visit the lower levels, Mr. Buckalew."

"They get rough down there," Buckalew reminded. "Lots of rowdy customers—space-crews on leave, confidence men, and all that."

"I can get rough, too," said Stover. "You know, I feel a scrap coming on. I won't deny I'm a fighter by temperament, Mr. Buckalew."

"Your grandfather was a fighter, too," said Buckalew, his deep, dark eyes introspective as if gazing down corridors of the past. "Much like you in his youth—big, happy, strong. Later he turned his back on all this, Pulambar and other pleasure points, and became the highest rated natural philosopher of his time. You inherited his job, you tell me—the unfinished job of perfecting the condenser ray."

"A job that ought to be done," nodded Stover.

The drama on the girders had attracted the attention of several taxi-planes (Chap. XIII)

"A job that must be done," rejoined Buckalew earnestly. "You tell me how much you like Pulambar, but doesn't that extravagant lake down below make you feel a trifle vicious? Don't you stop to think that the poor thirsty deserts of Mars could suck up a thousand times that much water without showing it?

"Don't you understand how this great planet, with what was once the greatest civilization in the known universe, is dying for lack of water—or, rather, for the ability to keep that water? And that's what the condenser ray will do. By the way, you may call me Robert, if you like. That's what your grandfather called me."

Stover turned back to a remark he had begun earlier. "I said I'd like to fight—Robert. That's because I think, and keep thinking, of this man Malbrook who seems to own Pulambar and this wasteful lake and all. Why doesn't he divide the water with the unfortunate poor?"

"Because he's Malbrook," replied Buckalew shortly. "He won't like it, at that, if you make water too easy to get. That's what will happen if your condenser ray works. It'll condense all the water vapor that has been escaping up to now, giving rain and returning fertility to this planet."

"Grandfather used to talk like that," remembered Stover. "I'm not as brilliant as he is, but I'll work as hard—after awhile. Just now I want to get the ugly thought of those poor thirsty devils out of my mind. I'll have a drink."

"Your grandfather used to take *guil* in his wine," informed Buckalew.

Stover looked at his companion, and suddenly found it more believable that here was an old friend of his grandfather. For all the ungrayed hair and smooth face, Buckalew had eyes that might have been born with the first planets. Not old, but ageless. Stover began to frame in his mind a polite inquiry as to how these things might be. At that moment a strange voice, clear and low, broke in upon his meditations.

"Gentlemen, the management suggests that I say how glad we are to see you at the Zaarr once again."

BOTH rose, bowing. The speaker was the girl who had sung. "Please sit down," begged Stover, holding a chair.

She smiled and did so. Her eyes were large and dark, her chin smoothly pointed. Even without her heavy makeup she would be lovely. Beside Stover she seemed no larger than a child.

Buckalew signaled a robot waiter, who clanked across with drink, a healthful Terrestrial wine laced with powerful Jovian *guil*.

"This is a pleasure, Miss—" Stover stumbled.

"My name is Bee MacGowan," the singer supplied, smiling.

"I've been admiring your singing," added Stover, blushing. "A pleasure, I say."

"Not to that young man," murmured Buckalew, his eyes flicking toward a lean, glowering fellow who sat alone at a near table.

This guest, with his close-fitting black garments, the mantle flung over the back of his chair, and his pallid scowl beneath a profusion of wavy dark hair, might have sat for a burlesque portrait of Hamlet.

"Oh, he?" said Bee MacGowan. "He's a little difficult, but I owe him nothing. Anyway, this is only a professional conference, eh?"

Buckalew continued studying the youth with the angry face. "Isn't he Amyas Crofts, the son of a vice-president or something in Spaceways? Mmmm. You'd think a dark ray of the joy-lamp had flicked him, while a bright one strikes my young friend here. You're a bit of a joy-lamp yourself, Miss MacGowan."

It was Stover's turn to laugh. "Nothing affects Buckalew, though. Neither joy-lamp, nor wine. As a matter of fact, I've never seen him drink. His intoxication must be of the spirit."

Buckalew's smooth dark head bowed. "Yes, of the spirit. See, isn't that Mace Malbrook?"

The music had paused, and all stirred at their tables. One or two even rose, as though to greet high nobility. And as far as Pulambar's society was concerned high nobility was present.

Mace Malbrook was huge and soft, draped and folded around with a toga-like mantle of fiery red. His huge arrogant head, crowned with luxuriant waves of chestnut hair, turned this way and that. His face was Romanly masterful, for all its softness. The eyes were bright and deep-set, like fires in caves. His mouth looked hard even as he smiled at the respectful hubbub around him.

"So that's the man who rules Pulambar," said young Dillon Stover.

"Just as his grandfather ruled when your grandfather and I were young together here," nodded Buckalew. "The Malbrooks and Fieldings have gathered most of the property rights and concessions in Pulambar. They're also partners in the Polar Corporation that distributes water by canal over Mars."

Malbrook was being offered the best table. But he had sighted the little group across the room.

"I don't like people who stare at me," said Stover audibly.

And those seated nearest him flinched as at a blasphemy. But he meant it. The great Malbrook was to him a rude water-thief, no more and no less.

"Easy, Dillon," counselled Buckalew softly. "Malbrook's the law here."

"What's the matter, Miss MacGowan," Stover asked the girl beside him. "You're pale. Does he frighten you?"

"I think he does," she replied softly and woefully.

Malbrook was striding across toward them. Reaching their table, he bowed with a heavy flourish. The room was expectantly silent.

"Aren't you the girl who sings?" he purred, as if sure of his welcome. "I have decided to give you some of my time and attention. These gentlemen will excuse you, I am sure." And he looked a command at Stover.

DILLON STOVER stood up, towering over Malbrook, who was not particularly small.

"What do you mean by strutting up like this?" he demanded. "Who are you?"

Buckalew, too, rose. "After all, Malbrook, this is a trifle irregular," he began mildly, when Malbrook snapped him off.

"You know me, Buckalew, and you'd better not prate about irregularities. I could embarrass you considerably, with two words. Or even one—a word that begins with R." The deep, bright eyes turned to Stover again, raking him insolently. "And since you don't know me, youngster, wait until I speak to you before you start dictating. All I want from you is the company of this lady."

He put his hand on Bee MacGowan's shoulder. She twitched away. And Stover promptly knocked Mace Malbrook down. Just like that.

Even as he uppercut Malbrook's fleshy curve of jaw, Stover knew what would follow. This was a man of importance and power. There was going to be trouble. While Malbrook bounced on the crystal floor, Stover kicked his chair away and set himself to meet a rush of attackers.

It did not come. Dead silent, the people at the tables stood up, as at a significant moment. That was all. Stover, who would have gladly fought a dozen Pulambar sparks, felt a trifle silly.

Then several figures quietly approached—Prrala, the Martian proprietor, and a pair of robot servants, silvery bright and taller than Stover. Behind them came a slight, sinewy fellow in green and silver who stooped to assist Malbrook. On his feet again, Malbrook faced Stover, hard-eyed. One well-kept hand rubbed his jaw.

"You struck me," Malbrook said incredulously.

Stover could have laughed. "Indeed I did, and I'll do it again if you don't mend your manners."

Bee MacGowan was leaving, at a gesture from Prrala. The angry-faced youngster, Amyas Crofts, was following her and talking rapidly. Meanwhile, Malbrook eyed Stover with insolent menace.

"Fine physical specimen," he sighed. "Worth working on. We'll go further into the matter, of course."

Stover understood. A duel. The System in general scorned duels. In some places they were forbidden, but

they happened in Pulambar. Anything could happen in Pulambar. Occasional mannered killings added spice to society. Just now, he was being chosen for a victim.

"Whenever you like," he replied. "Mr. Buckalew will act for me."

Prrala touched one of his robots, and the thing moved nearer to Stover, as if to prevent him from doing something or other. Robots were apt to overawe newcomers in Pulambar with their size and metallic appearance of strength, but Stover, a scientist from boyhood, knew them for what they were—clumsy, dull makeshifts that could do only the simpler tasks of waiting on mankind.

"Keep that tin soldier back," Stover warned, "or I'll smack him over."

"I only wissh that therre be no morre violent quarrrelling," said Prrala in his purring voice.

"There'll be no more quarreling here," promised the sinewy man in green and silver, turning to Stover. "What's your name? Stover? Before you go asking for challenges, better realize that Mr. Malbrook is the most accomplished duellist in Pulambar. You haven't a chance against him."

CHAPTER III

Sudden Death

THIS speech carried to almost every ear in the hall. Stover bowed.

"I can't withdraw, after that, without looking afraid. I'll fight your friend Malbrook very cheerfully, Mr. —Mr.—"

"Brome Fielding," supplied Buckalew in a worried voice, and Stover remembered that this was the name of Malbrook's partner in society and finance. "I wish, Dillon, that in some way—"

"Never mind, Buckalew," snarled Malbrook suddenly. "Don't try to talk him out of it. I've challenged, and he's accepted. Do I have to remind you again that you'd better do as I say?"

"That's enough," growled Stover so savagely that everybody faced him. "If it's killing Malbrook needs, I'll cooperate." His anger had risen steadily higher, but he felt cold and steady. "I begin to think he should have been killed long ago. Listen, everyone!" he shouted to the roomful. "Haven't many of you wanted to kill this strutting swine? Well, I'll do it for all of us."

Prrala, all flower-head and waving arm-tentacles, made little hisses and gestures of pacification. Buckalew swiftly caught Stover's arm, leading him into the vestibule. A helio-taxi hung there, and they got in and headed for their tower lodgings, Stover still protesting. The sky was doubly starry overhead, and the two moons of Mars, larger than Luna seems from Earth, gave them white light. Below beat up the welter of light and sound from the lower levels.

"It isn't as if you loved that girl, or even knew her well," reproved Buckalew. "If you did, it might be worth your while to commit suicide like this."

Stover cooled a bit. "How did I get into this position of kill or be killed?" he demanded. "I was minding my business. Up bobbed Malbrook to act a first-class pig. No man would endure—"

"Folk in Pulambar endure a lot from Malbrook," said Buckalew significantly.

And Stover remembered how Malbrook had snubbed Buckalew by a threat of exposure—exposure in one word, beginning with R. What could it be? Was Buckalew secretly plotting rebellion? But his own problem had better occupy his attention.

"Don't be so sure he can kill me, Robert," he growled, leaning back against the cushions of the flyer cabin. "What will this duel be with? Electro-automatics, ray sabers, MS-projectors, or just plain fists? I'm handy with all of them."

"Palambar duels aren't that simple. Malbrook, the party attacked, can choose his own weapons and conditions. He might make it under water, if he thought he swam better than you. Or with knives or acid hypodermics. It might be a cut of the cards, loser

to drink poison—with cards stacked. Or in a dark room, each with a single-shot pistol, Malbrook choosing a room he knows well and which you've never entered. He's boss, I say. He can run this affair, like any affair in Pulambar, to suit himself."

"Thanks for the tip," said Stover, his lips hardening. "I'm to be slaughtered, then? But I'll make my own terms. Both of us to go armed, and start shooting or stabbing or raying on sight. That would make it fair, and Malbrook doesn't deserve even that."

"Well," said Buckalew, gazing from a port, "we're at our diggings. Judging from the flyers moored outside and the lights inside, we have company."

They had. Stepping from the hovering flyer to their balcony and handing their cloaks to the robot attendant, they entered to find a group of people, brilliantly dressed and set-faced, in their sitting-room.

FIRST of these, Dillon Stover recognized tawny Bee MacGowan. For a moment it seemed as if she were alone before him, and most important—the trouble over her made her a responsibility and a comrade. Buckalew began making introductions.

"This, Dillon, is Miss Reynardine Phogor. And this is her guardian, Phogor of Venus. You've seen Mr. Amyas Crofts, but you haven't met him. You know Prrala, proprietor of the Zaarr; and Mr. Fielding, Mr. Malbrook's business associate."

"Also his second," added in Fielding. "I'm here to arrange matters. Malbrook, having choice of conditions, wants—"

"I don't care what he wants," interrupted Stover curtly. "I've just heard how duels are planned — framed, rather—in Pulambar. Nothing doing. Let us arm ourselves and fight on sight."

"Eh?" gasped Fielding. "That's not at all what Malbrook wants."

"I can well believe it," nodded Stover bleakly. "He's had things too much his own way here in Pulambar. He thinks he can insult ladies like Miss MacGowan and kill men like me, because he has the difference on his side. Well, I'm holding out for an even break."

All stared at Stover. Reynardine Phogor spoke first.

"I'm on the fringe of all this. I'd like information and explanation, Mr. Stover."

"If I can give you either." And Stover bowed courteously.

The girl was almost as tall for a woman as he for a man, of generous but graceful contour, with sultry dark beauty. Her hair, by careful processing, was fashionably "brindled" — broad streaks of pallor among the natural dark. Her tight gown gleamed with jewels. For a moment little Bee MacGowan seemed almost dull by comparison.

"Frankly, I thought I was on the best terms with Mace Malbrook," she was continuing. "We talked of marriage. Then he quarrels with you over this—this—" She gestured at Bee MacGowan.

The singer was pale but angry. "All I came here for was to see if I couldn't stop the duel some way," she protested.

Amyas Crofts snarled in his throat. "Speaking of marriage," he said, "consider any idea of that off between us, Bee."

"I never accepted you," Bee flung back.

There was a moment almost of concerted recriminations—Crofts, Reynardine Phogor and Bee MacGowan all at once execrating Malbrook. Bee MacGowan quieted first, as if ashamed of her exhibition. Then Fielding waved Crofts silent.

"When I tell Mr. Malbrook what you've said," he announced grimly, "he'll give you a challenge to follow this affair with Mr. Stover."

Crofts turned pale as ashes, but clenched his bony fists. Meanwhile Phogor, a richly clad Venusian with the wide mouth, pop eyes and mottled skin of a monstrous frog, was addressing his stepdaughter.

"Control yourself, Reynardine. I do not like this loud—"

"I don't like it, either!" she cried. "Daddy Phogor, it's no more fun for me than for you. But if I didn't fight for my man—" She whirled upon Bee

MacGowan. "Survival of the fittest, you warbling little sneak—and I feel mighty fit. Well Mr. Stover? You promised to explain?"

"If you give me a chance," replied Stover quietly. "I had just met Miss MacGowan. We weren't beyond the first introductions when this Malbrook fellow swaggered up and made himself obnoxious. I hit him, and he challenged me. Just like that. And I demand a fifty-fifty chance. I think that covers everything."

PHOGOR boomed forth, loudly even for a Venusian.

"I did not know how things stood with my ward. If Malbrook offered marriage, then followed with this disgraceful conduct—" He broke off for a moment. Then, "Don't try to frighten me by staring, Fielding. You and Malbrook are absolute rulers here, but I'm important on Venus. I have money and power. I'll take care of myself and Reynardine."

"What brings you, Prrala?" Buckalew asked worriedly at this juncture.

The long-robed Martian bowed. "I wissh peace," he slurred out. "It will haarm my business if it iss rreporrted that a morrtal duel had itss sstarrt in my esstablisshment. I hope to brring about a bloodlesss ssettlement."

Stover waved the appeal away. "Sorry. Mr. Fielding fixed it so that I couldn't withdraw by telling how dangerous his friend is."

The Martian bowed. "Then I musst trry Mr. Malbrrook." He said farewells all around and departed.

"Malbrook won't listen, either," Fielding said as the door closed behind Prrala. "And when he hears those charges of foul play he won't like them. Nor, Buckalew, will he appreciate your standing behind Stover in that attitude."

Buckalew's eyes glittered. "Do you think I'll endure being bulldozed forever?" he demanded.

"You'd better endure it forever," warned Fielding.

"Someone should silence Malbrook's dirty mouth," said Buckalew hotly, and walked away across the floor.

Phogor moved doorward.

"Come, Reynardine," he said gravely. "You see the low valuation Mr. Malbrook places upon you and your feelings. Mr. Stover, I am inclined to wish you good luck."

Fielding laughed aloud. "You're optimistic. Malbrook will slay this insolent young spark with no effort. You, Phogor, will wish you hadn't spoken like that—and the rest of you, too." He took a step toward Bee MacGowan. "As for you, you little troublemaker—"

"Fielding, shall I give you the twin to that punch Malbrook got?" asked Stover harshly. "No? Then clear out."

In a few moments all the callers were gone but Bee MacGowan and young Crofts.

"Amyas," said the girl, "will you go on ahead? I have something I must ask Mr. Stover." When the youth had ungraciously departed she faced Stover. "I've done this to you," she accused herself tremulously. "Do you think that I might go to Malbrook and straighten this out?"

"Miss MacGowan," said Stover, "you seem to think that I stand greatly in fear of what that lardy bully can do. Give yourself no concern. The one to suffer will be Malbrook. There are graver reasons than a mere brawl."

"Drop it, Dillon!" pleaded Buckalew, returning from an inner room. "Malbrook and Fielding can do as they please. You don't stand a chance. Since you've refused a formal duel and threatened Malbrook, there'll be an armed watch set. You may even be arrested. At the first overt move you make—" Buckalew's long, fine fingers snapped—"you'll be eliminated."

"They can't!" protested Stover.

"They can do anything—kill you and ruin me, just like winking."

"I'll go to Malbrook," said Bee MacGowan again, firmly.

"Come back!" cried Stover, hurrying after her. But she was already gone. He reached the balcony just in time to see her board a helio-car and soar away.

Stover pressed a button, setting aglow the signal for an air-taxi to

come. Then he returned to the sitting-room.

"She'll only give Malbrook another chance to insult her," he began, then saw that Buckalew had left the room. He went to a locker and took from it an electro-automatic pistol. Thrusting this into his girdle, he went back to the balcony.

WELL, the arbiter of Pulambar society was set on getting his blood, thought Stover. Mace Mal-

Three times the Pulambar police came to peer in the desert dome (Chap. VII)

brook, starver of the poor, killer of the thirsty, bully and snob and tyrant, might think the quarrel had started from a trifle, but Stover's unpleasant experience of the afternoon, coupled with the insult to Bee MacGowan and perhaps stirred up by drink and joy-lamp, had helped launch that blow in Malbrook's face. Now since death

threatened him, it was imperative that he strike first.

A flying car swooped close, and Stover sprang aboard. "You know where Mace Malbrook lives?" he asked the pilot.

"Who doesn't? Are you a friend of his, sir?"

"I'm an enemy of his — the man who's going to kill him," replied Stover. "Take me to his place at once."

"Sure thing," chuckled the pilot, plainly wondering what sort of joke this glittering customer was pleased to make.

Malbrook lived in a broad central tower of Pulambar, one of the four or five tallest, proudly aloof from the others. Stover disembarked on a terraced balcony.

A jointed robot servitor tried to halt him, but a shove of his big hand swept the stupid thing clanking clumsily aside. He burst into a reception hall, richly and garishly furnished. Before an inner door sprawled something, another robot, its silvery body clad in the white coat of a valet. It was quite still and limp, the front of its glass face-lamp broken. Somebody else had been here, and in a nasty mood.

Stover stepped across the metal carcass, up a hall and into a lighted room beyond. He came face to face with Brome Fielding, who lounged on a settle outside a heavy metal panelway.

"Where's Malbrook?" demanded Stover.

Fielding jerked his head at the panel. "Inside his private rooms. I think Prrala's with him, trying to talk him out of the duel. No use your trying the same thing; it's beyond apologies now." Fielding's eyes shifted to the pistol-butt at Stover's waist. "Why are you carrying that gun?"

"It's for Malbrook," said Stover. "Who smashed the robot outside?"

"You mean Malbrook's valet? I posted him there to keep people out. Phogor tried to get in with that stepdaughter, and one or two others."

"The valet's wrecked," informed Stover. "Get out of my way. I'm going in after Malbrook."

Fielding made a snatch at Stover's gun, and the young Earthman dispassionately hooked a fist to his jaw. The fellow spun around and crumpled in a corner. Stover knocked on the panel ringingly.

"Open up, Malbrook," he called. "Either let me in, or come out. It's Stover. If we're going to fight, let's do it now."

Silence, for perhaps five seconds. Then:

A thunderous crash of sound and force rocked the apartment around like a skiff on a hurricane sea. Stover was hurled backward, the metal door upon him. He fell, wriggled out from under the slap, and came groggily to his feet. Where the door had been set was now an oblong of murky light. He faced it, pistol in hand. Whatever had happened wasn't enough to kill him. Let Malbrook show his head.

"Clumsy work!" he cried in challenge. "I'm still all in one piece. Show yourself, and we'll finish this business."

Fielding was getting up, shaky and half-stunned. "What — what — " he mumbled.

"Explosion," said Stover. "Inside. Your friend Malbrook tried some cheap trick, but it didn't work."

Fielding darted through the doorway. Inside, he screamed once, loudly and tremulously. A moment later he sprang back into view.

"Malbrook!" he cried. "He's— dead!"

CHAPTER IV

The Law in Pulambar

THAT news cleared Stover's buzzing head like a whiff of ammonia. He bounded past Fielding into Malbrook's private apartment.

The room was full of hot, choking vapor, the sybaritic luxury thrown into turmoil by the explosion. Platinum-and-velvet furniture was overturned, gorgeous hangings ripped to shreds, delicately tinted walls racked and bulged. Another step, and he almost stumbled over something.

Mace Malbrook, judging by the rags

of that fire-colored mantle. No person could be so shattered and live. Beside him lay another still form, a flower-headed Martain, still moving slightly.

Stooping, Stover picked up Prrala's bladdery body and bore it out into the hall. Fielding was quavering into a vision-phone.

"Send police! We have the corpse, yes—and the killer!" Spinning, he leveled a ray-thrower.

"You're under arrest, Stover," he said.

"Don't be a fool," snapped the other, laying Prrala upon the settle where Fielding had first been sitting.

The Martian finally appeared to regain consciousness.

"Sstoverr?" he slurred feebly. "Why did you do it?"

"I did nothing," Stover assured him. "Just as I knocked—"

Police were rushing in, big, hard-bodied men in silk-metal tunics of black. Most of them were of the Lower Pulambar Patrol, but the leader wore the insignia of the Martio-Terrestrial League Service. He was gaunt and gray-templed, and his narrow eyes took in at a glance the still figure on the couch, Fielding with his leveled weapon, and the baffled, angry Stover.

"I'm Chief Agent Congreve," he introduced himself crisply. "What's what?"

Fielding gestured with the ray thrower. "Stover did it. He charged in, slapped me down, and—"

"I wasn't even inside," exploded Stover. "An explosion killed Malbrook and hurt Prrala here, almost getting me, too."

Congreve faced Fielding. "You saw this man do the killing?"

"No, he knocked me down, I tell you. But he and Malbrook had quarreled. He came here for a showdown."

Congreve turned to Stover. "How much of that's true?"

"All of it, except that someone beat me to it. I didn't kill Malbrook."

Two officers were inspecting the wrecked room. "Almost blown to pieces," reported one. "Can't be sure of the explosive."

"Then make sure," snapped Congreve. "Chemical tests, and hurry before the air freshens. Doctor, how's that hurt Martian?"

A Venusian, bending over Prrala, replied gravely.

"He is reviving a trifle. May speak —perhaps for the last time."

"Take a record," Congreve directed still another man, who produced a dictagraph from his belt-pouch. Then, to Stover: "If you killed Malbrook, why not save us both trouble and say so?"

"I didn't," repeated Stover. "That's enough for you."

"You're talking to the law," warned Congreve.

"I seem to be talking to a fool. Fielding's the only witness, and he admits he was unconscious when the blast went off."

"You came here to kill Malbrook," accused Fielding.

"That has nothing to do with it, I was too late to kill him."

The Venusian doctor spoke again. "Quiet. This patient is trying to speak." He needled stimulant into Prrala's neck. "Do your best," he urged the Martian. "Tell what happened."

ONE of Prrala's tentacles fluttered up toward Stover. "Thiss man killed Malbrook. I wass prressent."

"Prrala was trying to make peace," volunteered Fielding. "He was in Malbrook's room when—"

"Let him tell it," bade Congreve.

Prrala managed more words. "We thought we werre alone. But, while we sspoke, ssomeone appeared in the rroom with uss. Malbrrook sspoke: 'Sstoverr!' And I ssaw that it wass he."

"Prrala!" protested Stover. "I was outside."

"But I rrecognized you. . . ." Prrala was growing weaker. "Grreat height —blond hairr—gold garrmentss—it wass you, Sstoverr. Why. . . ."

"He's close to the brink," said Congreve. "Needle him again, Doctor. Prrala, tell us the rest."

"Little to tell . . . Malbrrook ssaid, 'Sstand back, orr I firre.' Sstover sseemed about to leap. Malbrrook firred an electrro-automatic . . .ex-

plosion . . . I know nothing morre. . . . "

His voice died away Stover knelt beside him.

"You say I'm the killer, Prrala. But did nobody come in while you were with Malbrook?"

He thought of his own visitors earlier in the evening. Each had wanted to see Malbrook. Prrala summoned his last strength.

"Yess . . . one came . . . interrrupted uss forr a moment. . . . "

"Who, Prrala? Who?"

"It wass. . . . " The Martian fell limp and silent.

"Wake him, Doctor," urged Congreve. "He can't die now."

The chief agent was wrong. Prrala was already dead.

Silence. Then two more figures entered. A policeman reported.

"Look what I found prowling around, Chief. Pretty, eh?"

He held Bee MacGowan by one round, bare arm. She was drawn of face, but her eyes were steady and unafraid. Congreve beckoned her.

"You knew Malbrook, young woman?"

She nodded. "I wanted to ask a favor. His robot valet wouldn't let me in."

"Are you the one who wrecked that robot?" asked Congreve.

Bee MacGowan said nothing. Stover spoke for her.

"When was wrecking a robot such a crime? They're simple, cheap—fifty value-units is plenty to pay for the best of them. And Pulambar crawls with them."

"Take the young woman's name," ordered Congreve. Then, to Stover: "You talk too much. You're under arrest. Come to my office."

He slid a hand under Stover's elbow.

TORN between rage and bewilderment, Stover went with his captors to the police flyer. They sped across the starry night to an opening lower down in another tower and transferred to an elevator. Again descending, they came to an office. Congreve took the single chair, leaving Stover on his feet. Another officer held a dictograph.

"I give you one more chance to talk," said Congreve sternly.

"I tell you once more that I'm innocent!" yelled Stover, the hot temper that had brought him to this plight reasserting itself. "I had had a quarrel with Malbrook. I went there to fight him. But he died at the hand of some other man, and a good thing."

Congreve studied his prisoner. "Gold cloth. Big, swell-looking fellow. Rich. Popular. You'll be missed up in that high-tower set. They've got away with many a rough and silly thing, those idle-richers, but the murder of an important man like Malbrook is where simple law officers like me step in. You'll be made an example."

"While you take out your spite against the rich crowd by insulting me," said Stover acidly. "The real killer's getting far away."

"Hard to crack, this Stover," said Congreve to the man with the dictagraph. "Lock him up and let him think it over."

Again Stover was marched away, down a long corridor of gray metal to a row of doors at the end. One of these doors swung open. Stover stepped in.

The cell was metal-lined, about five feet broad by seven long, and barely high enough to clear Stover's blond curls. It had no window, only a ventilator, and the dimmest of blue lights. The sole furniture was a metal cot against the rear wall.

Congreve had followed Stover. "I'll put my cards on the table," he said, "because they're good enough cards to show. I know these things:

"You and Malbrook quarreled and were going to shoot it out. You came to his place, on your own confession, to have a showdown. He was shut in a special apartment built to defend him from any attack. The only way in was via the door, if it could be forced.

"A witness died saying that you were the guilty one. Nobody lies on his deathbed, Stover. Then there's Fielding's story, the report of a robot you pushed away to get in, and an air-taximan who says you told him you were going to kill Malbrook.

"Our tests show that the weapon was simple old-fashioned nitro-glycerin. You're down on Martian registers as a research scientist from Earth. You could have brought or made such stuff easily. You've been ugly and threatening to numerous persons and defiant to me. All you can say now is, 'I didn't do it.' "

"And I didn't," flung out Stover once more.

"I think you did. I think you smashed that guard-robot at the front door, knocked down Fielding, and jimmied Malbrook's door some way. He shot at you, but that wouldn't make your plea of self-defense any good. You were invading his premises. You blew him up. Only the last words of Prrala kept you from covering yourself somehow. That's what I'm going to prove against you in a court of law. You'll pay for the crime with your own life. Good-night, Stover."

The door clanked shut. Stover, alone in his blue-dim cell, sat on the edge of the cot.

"They can't do this to me," he said aloud. "I'm innocent. Innocent men aren't found guilty—or are they? In Pulambar anything can happen."

SUDDENLY the light turned green, then yellow, then orange, then red.

Stover gazed up at it.

"Joy-lamp!" he muttered. "Not that I'm very joyous, though. What's the idea?"

The answer came to him. For ages, Martians had used these ever-changing rays as a pleasant stimulant. People of Earth, not conditioned as a race to such things, were frequently intoxicated, sometimes drugged — even driven mad—when they got too much joy-lamp. The police, apparently, had another use for the device. A man's wits, befuddled, would present less of an obstacle to questioning.

"Congreve will quiz me again," decided Stover. "Expect to find me off balance and unable to lie. What won't they think of next?"

But he had already told the truth, and it had not convinced. Checking back, he could see why not. He had quarreled with Malbrook, struck him, threatened to kill him on sight. He had gone forth to do it. He had been prevented, probably, because someone had done the same errand more promptly.

"Congreve won't swallow it," he told himself moodily. "I'll get thick-tongued and mouth all this out. He'll think it sounds even goopier than before, and give me the next jolt of the third degree, probably less pleasant than the joy-lamp."

He put his mind on the mystery again. Only proof, complete and convincing, would set him free. Someone else had killed Malbrook. Who?

His mind turned to the visitors who had discussed the proposed duel at his quarters. Each, as it happened, had sworn to visit Malbrook, for good or ill. Prrala had been the first to go, and was dead now. What of the others?

If he was to be fuddled by the joy-lamp, he had best make notes from

[*Turn page*]

FOLLOW THE WORLD'S GREATEST SPACE-FARER

IN OUR

COMPANION MAGAZINE

CAPTAIN FUTURE

NOW ON SALE 15¢ AT ALL STANDS

Featured in the Winter Issue

•

QUEST BEYOND THE STARS

Complete Book-Length Captain Future Novel

By **EDMOND HAMILTON**

which to argue. From his belt-pouch he took a small pad and a pencil. Waiting for the joy-lamp to give him a clear violet light, he began to write.

REYNARDINE PHOGOR

Character: Proud, hard, beautiful. Jealous of Malbrook's attentions to Bee MacGowan. Considers herself scorned. Probably capable of killing.

Possible Motive: Jealousy and injured pride.

Possible mode of murder: As Malbrook's fiancée, may have known how to enter his specially defended apartment.

PHOGOR

Character: Venusian. People of Venus consider murder lightly.

Possible motive: Knew nothing of stepdaughter's engagement to Malbrook until incident of challenge. Surprised, resentful.

Possible mode of murder: May have pushed in, as I am accused of doing. Got there ahead of Prrala and Fielding, hid in room before it was closed.

ROBERT BUCKALEW

Character: Mysterious, witty, likeable. Probably would kill if he decided it necessary.

Possible motive: Malbrook threatened him with exposure of some deadly secret.

Possible mode of murder: As close acquaintance of Malbrook, with quarrel and threat of long standing, may have previously planned way in and method of killing. If so, must have left for Malbrook's when I did.

AMYAS CROFTS

Character: Callow, vicious, vain, hotheaded.

Possible motive: In love with Bee MacGowan—jealous of Malbrook. Also, it was suggested that Malbrook might kill him in later duel.

Possible mode of murder: Stealthy or violent entry.

BROME FIELDING

Character: Ruthless, haughty, shrewd. Long associated with Malbrook.

Possible motive: Possible quarrel, personal or business. Both men masterful and violent, capable of such clash.

Possible mode of murder: Hard to figure out—accomplice or illusion.

MY OWN DEFENSE

Despite identification of myself as killer, there may have been impersonation—mask, wig, stilts for height, costume. Light not too good, appearance brief, Prrala's testimony given in great pain and at moment of death.

Explosion occurred in chamber while I was out. Recommend more thorough investigation.

This last seemed hard to write. Stover felt weary, half-blind. He put away his notes and tried to lie on the cot. Then he looked up at the joy-lamp, and smiled as if in inspiration. He slid under the bed.

Thus shaded from the befuddling glow, he felt his head wash clear again. Maybe he wouldn't be thinking at too great a disadvantage, after all.

CHAPTER V

The Escape

TIME passed. Stover slept, then awakened. His door was being opened. A man in uniform entered. Congreve? No, this was a sturdy, dark fellow with a tray of dishes, plainly a jailor of some sort. Two pale eyes, strange in that swarthy face, looked at Stover.

"What are you doing down there?" demanded the jailer. "Here, the chief thought you might like some rations."

Stover rose. He felt no more intoxication. "What time is it, approximately?" he asked.

"Evening. Past sundown. I'm going off duty in five minutes." The jailer set the tray on the bed.

Stover, then, had slept for hours, and it was dark once more. "Wait," he said. "I want to talk to you."

What he really wanted was a chance to study the jailer's face, for inspiration had come to him; but the chance was short.

"Against orders," he was told. "I've got to push along."

And the man left. But not before Stover had seen that he had a face somewhat like his own—big, straight nose, square jaw, bright blue eyes. The difference was in complexion—black hair and brown skin. And complexion could be changed.

First Stover inspected the contents of the tray. Most of the food was synthetic—meat paste, acid drink, a salad of cellophanelike sheets of roughage. What interested him most was a hunk of butter substitute. Sitting down beside the tray, Stover again produced the pencil from his belt-pouch.

With his strong fingers he split the

wood and extracted the soft, crumbly lead. Breaking the black stick in two, he rubbed the two bits together over the butter. The sooty powder fell thickly, and Stover mixed it in with a fork, producing a wad of gleaming oily-black substance. Quickly he rubbed this into his blond hair, smoothing out its curls and plastering them to his skull. The tray, which was of shiny metal, served as a mirror. He looked about as dark-haired as the jailer.

"So far so good," he approved, and again overhauled the food-stuffs. The cup of acid drink seemed most promising. Once more he explored his pouch. It yielded two cigarettes. Splitting these, he dropped the shreds of tobacco into the cup. Judicious stirring and mixing provided him with a coffee-brown liquid. He made tests on the back of his hand, deepened the tint with the last of his powdered pencil-lead. Finally he doffed his stylish golden garments.

With palmful after palmful of the makeshift dye, he stained his big body and limbs, using the tray as a mirror while he darkened his face and neck as well. His hands and feet were also treated. Now he appeared as a naked, swarthy personage with strangely pale eyes who was not too different from the jailer.

He waited some time longer, to be sure that enough time had passed to insure the fellow being well off duty. Then he sprang to the door, beating on it with his fists.

"Help! Help!" he roared. "I'm penned up! Prisoner's escaping!"

Answering commotion sounded outside. Then a harsh voice:

"What's the racket in there, Stover?"

"Stover's gone," he made gruff reply. "When I brought him his food, he jumped on me, knocked me out and took my clothes. He got away!"

"Oh, it's Dellis?" The door was quickly unlocked and opened.

REMEMBERING that the jailor he impersonated had not matched his inches, Stover crouched on the floor. The shifting light of the joy-lamp helped his disguise, and the police guard who looked in was deceived for the moment.

"What happened, did you say?"

"Can't you see?" Stover yelled in feigned impatience. "He knocked me out and took my uniform. There's his rig." He pointed with one stained hand at his own crumpled garments in a corner. "While you stand there, he's probably clear away."

"Well, come out of there," the guard told him. "Wrap a blanket from the cot around you. We've got to make a report, quick!"

Stover wrapped himself up as directed, taking care to slump and so approximate the lesser height of the jailor Dellis. Under the blanket he brought along his felt and pouch. But he did not intend to appear before Congreve or other too-observant officers. Reeling, he supported himself against the door-jamb.

"I still feel shaky."

"Here, then." Another guard had come up, and the first guard beckoned him. "Take Dellis to the locker room while I report to the front office. That big society lad, Stover, got away."

Leaning heavily on the newcomer's arm, and half-swaddling his stained head and body in the blanket, Stover allowed himself to be helped down another corridor and into a long room lined with lockers. Against one wall was a cot, where he dropped with a moan.

"Hurt bad, Dellis?" asked the guard who had brought him.

"I hope not," sighed Stover. "Let me lie here for a while."

The other left. As the door closed, Stover sprang up and to a lavatory. Scrubbing violently, he cleansed hair and body of his messy disguise. Then he opened locker after locker. Most of the clothes inside were too small, but he found a drab civilian tunic in one, breeches in another, and boots in a third, all of them fair fits. Thus properly clad, he donned his own pouch and girdle and went to a window.

The level of the cells was still high above the noise and glow of the canal levels. A man less desperate might feel giddy, but Stover had no time for phobias. He must be free to find

and convict the true murderer of Malbrook. Only thus could he hope to survive.

Quickly he ripped the blanket into half a dozen strips. Knotting these into a rope, he tied one end to a bracketlike fixture on the outer sill. A moment later he was sliding down into the night.

The gravity of Mars being barely four-tenths that of Earth, Stover's huge body weighed no more than eighty pounds as it swung to the cord of knotted blankets. Even so, he needed all of his nerve, strength and agility for what he planned to do.

A few seconds brought him to the end of his line, thirty feet below the window-sill. There were no windows or other openings at that point, and no projections on the smooth concrete wall, only a metal tube, barely an inch in diameter, that housed some slender power lines and ran vertically beside him. Every fifty feet or so it was clamped to the wall by a big staple. One such staple held it at the point where Stover dangled.

He looked in the other direction. Ten or twelve yards opposite was another building, with many lighted windows. Given a solid footing, he might have tried to leap. As it was, he must bridge the gap otherwise. He hung to his blanket-cord with one hand while he tugged and tore at the metal tubing. It was none too tough, and broke just at the staple. A jerk parted the wires inside. He tested the broken tube. It was springy and gave some resistance, but would it be enough? He could only try, with a prayer to all the gods of all the planets.

GRASPING the tube with both hands, he quitted his cord. There he hung for a moment, like a beetle on a grass-stalk. Then the tube began to buckle outward at the staple clamp some fifty feet below. Stover's eighty pounds of weight swung it out across the chasm. He dared not look at the depths below. His eyes, turned overhead, watched the crawl of Deimos' disk across the starry sky. The tube was bending swiftly now—he was traveling out and down in a swift arc.

Ping! The tube broke at the lower staple. At the same instant Stover felt his shoulder brush against the wall of the building opposite. He let go of the tube, tried to clutch a window sill, and missed. He felt suddenly sick as he slid down the crag of concrete. His boot-heels smacked on a sill below, flew from it, and he made another desperate grasp. This time he made good his hold, and swung there, staring in.

The sizeable room was garishly lighted. People stood or sat inside, close-packed around tables. There was music from a radio tuned in on Earth, and a cheerful hubbub of everyone talking and laughing. At the table nearest the window were men and women in middle-class celebration clothes.

One of them flourished his loose-clenched fist, then brought it down and whipped it open. Out danced two pale cubes with black spots on their faces.

Dice—a game known when the pyramids were new, perhaps in the pre-civilized days before. Dice, which in ancient Rome had gained and lost mighty fortunes; which had delighted such rulers as Henry VIII of England, and such philosophers as Samuel L. Clemens of America. Dice, the one gambling game which had lasted to the thirtieth century.

"Game-dive," panted Stover. "Crowded, confused, relaxed. No worry about murders. I'll go in."

He worked along the sill, toward the next window. It was too far for his arms to span, but he spun his body sidewise, hooked a boot-toe within, let go and hurled himself across the sill and in.

He was in a private dining-room. A man and a woman sat at a table strewn with dishes, smirking affectionately at each other. As Stover drew himself up, the woman gave a little smoothered cry of alarm and shrank into her chair. The man rose.

"Listen," he snarled to her, "if you say this is your husband, I'll tell you I'm too old for such a blackmail game —"

"I'm nobody's husband," Stover interrupted. "I just climbed in on a

bet. Thought it was a game-dive."

"You're one window mistaken," the man said. "Get out of here."

Stover apologized and walked through a door, into the crowd beyond.

At the large central table, "indemnity" was being played. This old space-pirate game was almost as simple as blackjack and simpler than roulette. Each player could call for a card at each deal, or could refuse. Only those whose cards were of the same color stayed in. When all were satisfied, unretired players totaled the values of their cards, and high man won both stakes and deal. The money, which could be won or lost swiftly, was the chief excitement.

Stover carried a sheaf of value-notes in his pouch, most of them in thousand-unit denominations. Entering the game, he lost twice and then won a big pot and the deal. As he distributed the cards, the radio music ceased.

"Late news," said an announcer's voice, and the vision-screen across the room lighted up.

UPON it, huge and stern, appeared a man's head and uniformed shoulders. Congreve!

"We're cutting in to enlist the help of all law-abiding listeners," said Congreve's magnified voice, and all play ceased as attentions turned to him. "Yesterday a murder occurred in the upper tower section. Mace Malbrook —"

The rest was momentarily drowned by a chorus of cries. Everyone had heard of Malbrook. Then silence again.

"—but the murderer escaped," Congreve was informing whatever worlds might hear. "Every officer is searching for him, and a reward of twenty thousand value-units is being offered by Mr. Gillan Fielding, partner of the murdered man, for any information leading to the capture of—"

"Twenty thou!" ejaculated a man near Stover. "I'd like to pick that up. I'd open a dive like this myself."

"Not me," chimed in someone else. "I'd try to buy into the water monopoly run by the Malbrook-Fielding combine. That's where the dough is on Mars. Every year the rates get higher and the demand bigger. Twenty thousand units, invested now—"

"Listen to the description," growled a man tersely.

"—twenty-three years old, very large and strong," Congreve was saying. "Six-feet-three, Earth measurement. Terrestrial weight, about two hundred pounds. Martian weight, about eighty. Smooth-shaven, blond hair, strong features. Well educated, a scientist, pleasing personality. Escaped in clothes stolen from police."

"He sounds like a television hero," breathed a girl in the crowd.

"To supplement this description, I will exhibit a late photograph of Dillon Stover, accused of the murder of Mace Malbrook."

Congreve's hand rose into view, with a rectangular piece of board. The vision-screen concentrated upon it, making it larger and clearer until it filled the entire screen, showing a vivid color-photo, taken three days before. Stover showed erect, tall, smiling and carefree. He was wearing his golden costume, which seemed doubly bright on the screen. The girl who had spoken before now gave vent to a whistle as of admiration.

"What a prince!" she cried.

Congreve's face returned. "I thank you," he said. The screen darkened, and the music resumed.

CHAPTER VI

The Girl in the Game-Dive

AT ONCE a hubbub of chatter broke out. People of the middle-class section of Pulambar were far noisier and more easily entertained than the bored sophisticates of the High-tower Set. Stover steadied his hands, completing the deal.

"Play cards," he said.

The man beside him looked at him sharply. "You know, stranger, to judge from that description, you might be the guy they're after."

"I was thinking the same thing," nodded Stover. "I'm about that size

and age, and blond. Maybe I ought to turn myself in for the reward. Who wants cards on second deal?"

"But the picture killed it," went on the man beside him. "That bird in gold wasn't anything like you."

"Personally, I thought he looked like a sissy," grunted Stover.

He lost the next hand, cashed in and casually left the table. The brief interlude of play had helped to calm and encourage him. He was free and lost from pursuit, with a plan of campaign beginning to form. He went toward the door.

"Wait, big man," said a clear voice behind him. It was the girl who had admired his photograph on the vision screen. She was compact but comely, with red-dyed hair and a flashing smile. "Where are you going?"

"Your way," replied Stover promptly, feeling that a girl on his arm would be additional disguise.

They went out together, approaching a series of doors that were marked ELEVATORS, but she drew him away.

"Come along," she said. "I know an express that will drop us straight to the canal level."

"Just what I want," said Stover quite truthfully, and let her lead him along a side-corridor. At the end was a metal door. "What's your name?" he asked her, to make conversation.

"Call me Gerda," she said. "Enter. And what shall I call you?"

"Parker," he improvised. They came into a small, messy-walled room with one barred window and a telephone in a niche. "Here, Gerda, where's the elevator? And don't dig your elbow into me like that."

She laughed. "There's no elevator, and this isn't my elbow. It's a gun."

He sprang away, and the weapon rose in her hand, a vicious electro-automatic. She handled it with a forbidding ease. Her other hand slipped shut the catch on the door.

"Don't try anything suicidal," she bade him. "You're my prisoner, Dillon Stover. That fake dumb stare won't help. I've seen several photos of you besides that one on the televiso, and I had you spotted as soon as you walked into the game-dive."

"You were sent after me?" demanded Stover, giving up the farce.

"A regiment of us were. We knew you hadn't gone far. It was my luck to run across you."

"Congratulations," said Stover. "But the police will be more flattering than I."

The girl who called herself Gerda shook her red-dyed head. "Congratulations are nice. But I know someone who will pay for you with something besides congratulations and twenty thousand value-units."

"Who?" snapped Stover, for he knew she meant the murderer.

"You'll see soon enough," she told him with one of her bright smiles, and put her free hand on the telephone.

"Wait," he begged. "You speak of cash. More than the twenty thousand value-units the police offer. How much more?"

"Oh," said Gerda, her eyes wise above the leveled gun. "At least half as much again."

"I'll double it," said Stover, and she drew her hand back from the telephone. "May I take the money from my belt-pouch?"

SHE nodded permission, and he produced his notes. With what he had won at indemnity, he had a little more than the forty thousand he had offered. Counting off the surplus, he folded it and began to return it to his pouch.

"Wait," said Gerda greedily. "I'll take the whole thing."

Stover reluctantly surrendered all his money. She took it, thrust it into her own pouch. Then without lowering her gun, she caught his outstretched left hand in hers. A quick movement and she had snapped something on his wrist.

"Bracelet," she said. "Police bracelet. Isn't it pretty?"

Stover lifted his arm, staring at the thing. It was a plain circlet of nickeled steel, with a hinge and a lock. It bore a spherical device with a dial. From that sphere came a soft whirring sound.

"What's it for?" demanded Stover, angrily.

Gerda chuckled above her gun.

hung together at that. I feel a funny vibration all up my left arm. Must come from the fuel-feed lever."

He took his hand from the fuel-feed lever. The vibration still quivered his left arm, climbed and crawled into his shoulder and chest.

"Whup!" said Stover aloud. "It's that bracelet!"

Gerda, whatever her shortcomings, had spoken the plain truth regarding this bit of police equipment. At ten miles, she had warned, his body would be shaken as by a heavy rush of current. The vibration now possessed his whole body, and Stover felt sick.

The car swayed and bucked under his ill-steadied controls, and he righted it with an effort.

"This can't go on!" he muttered. "I'll set her down on the sand—I'm well outside the city—and see if I can't squirm out of that bracelet."

He nosed down, but his run of bad luck was well in. In descending, he went still farther from the police headquarters radio. In mid-flight, nausea possessed him. His sight went black, his brain whirled and drummed.

With one hand he strove to flatten out his flight for a landing, but the other—the hand that wore the bracelet—refused to do its work. There was a shock, a crash of sound, and Dillon Stover flew through the air like a football. He fell sprawling in dry, powdery sand.

On Earth, where his weight was more than double what it was on Mars, he probably would not have risen from such a heavy fall. As it was, he rose very shakily. The wrecked rocket was aflame. Overhead beamed the lights of other aircraft speeding to investigate.

"Got to get away from here," he told himself groggily. "Get away—"

He headed out into the desert. His feet sank into the dry sand as into fresh snow. The vibrations from the bracelet still tingled in his arm and chest, made his lungs pant and his heart race; but, on the ground and walking, they were more endurable. The fall had made his nose bleed, and somehow this relieved his distress for the time being. He walked on, on. His lesser Martian weight made travel swift for his Earth-trained muscles, for all the binding sand around his insteps and ankles.

Behind him the lights of rocket craft were settling around the fire. He hoped that their landings in the sand would obscure his footprints. Meanwhile, he wished that he had a drink, about a two-quart swig of water, such as Buckalew had given to the desert Martians.

Stover had not taken a drink since before his trip to Malbrook's. The liquid of his prison meal had been used to disguise him. And this arid place, far away from the city of Pulambar and its lake-evaporations, was drying, dehydrating, even in the chilly Martian night.

HE made the best of two miles' journey away from the investigators, then stopped. Overhead hurtled the disc of Phobos, giving him light whereby to examine the bracelet that dealt him so much misery. It was not too tight upon his wrist. He poked a finger under it, twiddled it, then tugged.

A red-hot pain shot through his forearm, as though all his joints were being dislocated. He hastily took his finger away. Again he remembered the baleful words of Gerda: *It will tear your arm off at the shoulder.* Better let bad enough alone. Meanwhile, what wouldn't he give for a drink?

Trudging onward, he pondered, despite his efforts to turn his mind elsewhere, on drinkables. Cold lemonade on the kitchen table at his grandfather's home, a stein of beer at college, water trickling down a rock-face at Rogers, Arkansas, the multitudinous beverages at the Zaarr—even the acid drink he had used for his disguise at the prison. He tried to curse such thoughts away, but his voice was thick and his tongue swollen.

Stover was scientist enough to understand all this. The atmosphere of Mars was light, one-third that of Earth. Plenty of oxygen made it fairly breathable, but it was hungry for water. Mars had so little water to give, and that little did not stay long—the lesser gravity could not hold

"Police bracelet," she said again. "It has a radio apparatus tuned to the waves of police headquarters. You don't feel anything now, but if you go, say, ten miles from here, your whole body will vibrate to the amplified waves, as though you were being subjected to a heavy rush of current. The farther you go, the more drastic and painful the effect. Fifty miles away, you'd be done for—your nervous system tortured to death."

She picked up the telephone and called a number.

"This is Gerda," she said into the transmitter. "You know—police undercover detail. I have somebody you're interested in."

"You're taking my money and now you're selling me to the police!" cried Stover in sudden comprehension.

Gerda merely smiled at him.

"Wait," she said into the instrument, and then to Stover: "Not to the police. To somebody who will pay more. I only put the bracelet on to prevent any accident. Try to get away from me, and you'll not get far. Now, stand easy—I haven't finished phoning."

She turned back to the instrument.

"You heard his voice," she cooed into the phone. "Is your price still offered? Then come at once to —"

Stover made a frenzied leap. An electro-automatic pellet zipped its way through his tousled hair even as he twisted the weapon away. Tucking Gerda's struggling body under one arm, he seized the telephone.

"This is Stover," he grated into it. "While this she-rat of yours bragged, I jumped her and took her gun away. I'll get you next. Who is this?"

A gasp over the wire. That was all.

"Then I'll come and get you without any help. You killed Malbrook, didn't you? You want to kill me before the law learns I'm innocent, don't you? But it won't work! Don't count your Dillon Stovers before they're dead and buried. Good-by until we meet for the showdown!"

He hung up, thrusting the captured gun into his tunic. Despite Gerda's frantic resistance, he coolly repossessed the money she had taken from him. Finally he bound her hands with her own belt and gagged her with a strip torn from her skirt. She glared above the gag.

"Good-by, my bewitching little doublecrosser," he bade her. "Stick to stool-pigeoning. The police will back you—if they don't catch you cheating. I'm going to catch the blundering killer you tried to sell me to."

"You'll never get away," she raged, managing to spit out through the gag. "That bracelet will bring you crawling back here."

"I won't wear it long," he said grimly. "It looks smashable."

"Try to cut or smash it," she dared. "There'll be an explosion that will tear your arm off at the shoulder. You'll not live through that. I'll be seeing you soon, big man—seeing you on your knees!"

"Don't hold your breath until then," he answered curtly.

Unfastening the door, he left, went down the hall and came to a corridor which led to an exit. Moored there was a speedy-looking rocket flyer. He sprang in, turned on the power, and sailed up and away.

CHAPTER VII

Thirst

LIKE most young men of his day, Dillon Stover understood very well the workings of rocket craft. This purloined one-seater was not the newest model, but it was serviceable. He felt sudden elation. Nobody knew his jumping-off place save the undercover girl, Gerda. By the time she escaped even that faint trail would be lost. She would think twice about warning the police. If she appealed only to the unknown killer, and if that unknown killer came seeking him, Stover would like nothing better.

"First," he decided, "I must get to another town and pose there under a new name and personality. I'll dope out this thing, maybe make a deal with some law-enforcement body that isn't too friendly with Congreve and the Malbrook-Fielding combine—hello, this rocket isn't any too well

water vapor. And so, as the moisture in his body was sweated forth, it was fairly snatched from him. He was dehydrating, like a prune or a date in a Sahara breeze, like a clay brick in a kiln.

Thirst was making him forget the lesser agony of the bracelet.

"I'd give up anything for a drink," he thought. "A thousand dollars of my legacy. My house in the Ozarks, that once belonged to my grandfather. I'd give up—but hold on. As a criminal I have no property to give up. Who would help me, if anyone were here? Buckalew? I wonder. Phogor? I doubt it. Bee MacGowan? Poor thing, she'd probably do what she could for me. But how long can this go on?"

Not long. For soon Dillon Stover fell on his face.

He struggled up to his hands and knees. More than ever he was down to first principles, a four-legged creature again, as man had been ages ago, before civilization or even savagery, struggling for life against the bitterest of environment.

He didn't intend to be killed, unjustly or otherwise. It wasn't on the books. Not for Dillon Stover. He managed to get up again. His tongue was swollen between dry lips, his stout knees wavered under his weight that seemed even more than Earth weight. But he'd get away from pursuit. And he'd drink.

Water ahead!

Both moons were up now, and they showed him a gleaming, rippling pool. With trees on the far side. He gave a joyful croak, and tried to run toward it. Again he fell forward and crawled painfully to the brink.

There was no brink.

Mirage. Or imagination. Dillon Stover would have wept, but there were no tears in his evaporated eyes. He sat, elbows on knees, and struck his forehead with his knuckles.

A LITTLE recovery now, enough to know that the bracelet's vibration was increased to a sharp agony. He had come miles away from Pulambar. Suddenly he wished he were back, even in jail. After all, there was comfort there, a bed to lie in, and doctors—and water. The Martians were right to prize it. If he could only wet his lips and wash his eyes. Then he'd think a way out for himself.

The sun was going to come up.

That would be the end. The dry Martian night had almost done for him; the blazing sun would finish the job. Perhaps it was just as well to lie down and die as quickly as possible. In the back of his head a little cluster of scientific-thinking cells computed that his night in this desert approximated five days of such an experience on Earth. Few people could survive that, even if they were as strong as Dillon Stover, and got help at the eleventh hour. And here was no help.

Wasn't there? He saw a shiny, semi-transparent blister among the sands, catching the first rays of dawn.

Under that would be Martians, a water plant—and water. Ever so little of the precious stuff would be a blessing.

He crawled there somehow. Remembering how the Martians inside a similar structure had burrowed out to the jug Buckalew donated, Stover began to paw and dig with his hands. The sand came away in great scooped masses. He got his head and shoulders under the glasslike under-rim, poked like a mole into the interior.

Something crept toward him, a Martian dweller. It had one of the artificial larynxes, for it formed words he could understand:

"Who arre you? Why do you darre—"

"My name is Stover," he whispered a wretched reply. "Dillon Stover. I am dying without water. Help me. Just—"

And he fainted.

So this was heaven.

The old talk about harps and songs and jeweled furniture had been wrong. It was more like the Zaarr, that report. Heaven really consisted in lying still in delicious dampness, with a ten-times blessed trickle of liquid into your open mouth.

Stover's eyes, no longer dried out, opened. And he saw heaven as well

as felt it. The dull-clouded inside of a semi-transparent dome, against which spread the long branches and broad leaves of a blue-gray bush was above him, while around him sprawled three bladder-bodied, six-tentacled, flower-faced Martians.

"Lie sstill," purred the one with an artificial voice-box. "You arre verry ssick—nearr to death."

"I'm not," protested Stover, and sat up.

His dusty garments, stolen in a police dressing-room, had been removed. His naked skin felt cool, moist, and relaxed. He touched his arm with a finger. There was a sleek damp to it, like the damp of a frog.

"Lie sstill," said the Martian spokesman again. "If you do not fearr ssickness, fearr then the coming of a ssearrch parrty."

Stover lay back at once in the neat sandy hollow where they had bedded him. "Are they looking for me?" he asked anxiously.

THE flowery head of his informant nodded, Terrestrial fashion. "Thrree timess they have come herre to peerr in. We ssaw them coming, and each time we coverred you with ssand to hide you. We told them we knew nothing of a fugitive Terrresstrrial. A wind blew away yourr trrackss."

Stover was content to lie still now. "How long have I been here?" he asked.

"A day and a night. It iss now the ssecond forrenoon."

Back into Stover's wakening mind floated memory of all that had transpired to bring him here. So it was getting on toward noon. Three noons ago he had awakened in Buckalew's luxurious apartment, reckless and carefree. At noon the following day, he had been in the police cell, again sleeping. When the third noon came, he had lain senseless in this poor makeshift den where Martians huddled to keep life in themselves. And now—

"I'll be awake this noon," he said aloud. "I've got a lot of escaping to do." To the Martian he said: "Which way is the nearest city? Besides Pulambar, I mean."

A tentacle pointed away. "But you cannot travel by day, on foot and underr the ssun. Wait until night. We sshall help you then."

Once again Stover took a look about. He saw whence had come the trickle into his mouth. One of those drinking tubes had been thrust into the integument of a great branch above him. Since he was awake, the tip of the tube had been thriftily plugged. But he felt dry again, and as though reading that thought in his mind, the Martian who did the talking removed the plug.

"Drrink," he bade Stover, and Stover drank.

He pulled strongly on the tube, and a delicious spurt of plant-juice, free-flowing and pleasantly tart-sweet, filled his mouth. What joy to drink! What relief, what privilege.

He stopped sucking all at once.

"Plug that up," he commanded. "Isn't it very precious, that juice? How is there enough for me and for you others, too?"

Something like a deprecating chuckle came from his attendant. "Do not ssay the worrd 'enough', Dillon Sstover. On Marrss, therre iss no ssuch worrd ass 'enough'."

"You've been depriving yourselves to take care of me!" Stover marveled, almost accusingly. "Why? I'm a stranger, a vagabond, wanted by police, charged with murder."

CHAPTER VIII

The Hope of Mars

HE was suddenly aware that another dreadful pain was missing, the racking vibration of the bracelet. He lifted his left hand. The skin of it was scraped, broken in places, but the wrist was naked. The sinister metal ring was gone.

"How did you get it off of me?" he asked. "It was due to explode if you tinkered with it."

"And sso we did not tinkerr with it," was the calm reply. "Firrsst, a grreasse to make yourr hand and

wrrisst verry sslipperry—then carreful prrying and tugging. We got the brracelet off without injurring it. We know how to deal with ssuch thingss. One of uss crrept forrth and laid the brracelet on the ssand farr frrom herre. It was picked up ass a clue by police ssearcherrs."

Dillon Stover sighed gratefully. Not only was he free of an awful agony, but there would now be no following of him by those who hunted him.

"I started to ask you," he resumed, "why you helped a stranger, a Terrestrial fugitive from the law, to so great an extent."

"You arre Dillon Sstoverr," said the Martian simply. "Beforre you lost yourr ssenssess, you told uss yourr name."

STOVER looked his mystification. "But what difference—"

A tentacle pointed to a little niche across the dome-den. There nestled a shabby old radio, near which the other two Martians sprawled. The thing only whispered, but they were getting news of the universe.

"We have communicationss," the one with the voice-box told Stover. "We know what befell you in Pulambarr, what charrge iss made by the officialss. But we know, alsso, why you came herre—to do the worrk begun by yourr grrandfatherr."

"The work of my grandfather," repeated Stover. He had almost forgotten it. "You mean the condenser-ray?"

"Yess. The hope of Marrss."

Stover had recovered enough to tell himself savagely that he had become short-sighted, selfish, craven. The Martian was right. He, Dillon Stover, meant the sole chance of a dying world for a new lease on life. He was fleeing for more than his own life.

"I know so little," he pleaded. "I've been here only three days, and for most of that time I've been running from both police and law-breakers. I have now a better idea of what water means to this planet, but—"

"Come, if you arre strrong enough," bade his helper.

Stover got up, having to stoop beneath the low dome, and made his way to the radio. Quickly the Martian turned on the television power, and a small screen lighted up. Tentacles turned dials.

Stover saw a gently rolling plain, grown over with hardy, tufty scrub, the chief vegetation of Mars. From it rose a vast and blocky structure, acres in extent. The construction seemed to be of massive concrete or plastic, reenforced by joinings and bands of metal. As the viewpoint of the television made the building grow larger and nearer by degrees, Stover saw that it had no visible doors or other apertures. Along walks at the top, and around railed ways at the bottom, walked armed Martian guards in brace-harness to hold them upright. The roof bristled with ray-throwers and electro-automatic guns.

"A fort?" said Stover. "I thought Mars was at peace everywhere."

"Therre iss no peace in the conflict with drrought," his informant told him. "You ssee yonderr a rresservoirr. It holdss a gatherring of the mosst prreciouss thing on thiss planet —waterr."

"It has to be guarded like that?"

"Ssurrely. People would rrisk anything to ssteal a little—only a little. The only frree waterr on all thiss worrld iss in the guarrded and rresstricted city of Pulambar, frrom which you have fled."

The dial clicked, another scene showed itself. Stover saw a building with open front before which huddled and crept a line of wretched Martians. Each presented a document to an official. Each was grudgingly handed a small container, no larger than a cup. Stover turned his head away. With a sympathetic purr, his companion turned the radio off.

"Water-lines," muttered Stover. "Guarded reservoirs. Little camps like this—and nobody has enough water. Malbrook, who held the monopoly, did this to Mars."

"You sserrved uss well by killing him," said the Martian. "Come, I wissh to dampen yourr sskin again."

HE would not take no for an answer. An application of the

plant-juice refreshed Stover's thirsty body all over.

"Do not thank uss," deprecated the Martian. "We do thiss becausse, to rrepeat mysself, you arre the hope of Marrss. By deprriving ourrsselvess of waterr rrationss today, we arre prreparring you forr the tassk of winning uss plenty in the futurre."

"You're trying not to be noble," Stover smiled. "But what if I miss out? If I'm caught, or killed, or if I try to develop the ray and can't?"

"We sshall have played forr high sstakess, and losst."

Stover found his clothing, neatly folded away, and began to struggle into it.

"When nightfall comes, I go," he announced.

"The besst rrefuge among the nearr townss—" began his rescuer.

"I'm going back to Pulambar," said Stover grimly.

All three Martians turned toward him silently. They had no human eyes, yet he had the sense of being stared at.

"I mean it," he insisted. "Pulambar's the place. The lights will guide me, and this stuff on my skin will keep me from drying out too soon. I can get by the outer guards, because I'm Terrestrial with money in my pocket. I've got to find the real killer and first put myself in the clear."

"Then?" prompted the Martian with the voice-box.

"Then," and Stover's voice rang like a bell inside the little dome, "I'm going to perfect that condenser-ray. I was wrong to want to play around first. Buckalew was right to keep after me. You've shown me a duty I can't turn away from. That killer in Pulambar had better hold onto his hat, because I'm going to smack him right out from under it!"

ONCE more back on the bright streets of Pulambar, Stover skirted a building and came to a canal crossing full of music and carnival. Entrance to the city had been quite as easy as he had figured. No one had dreamed that the fugitive would circle back. He halted now to consider his next step.

A mortised gondola of the cabin type bore a yapping loud-speaker urging all to join a sight-seeing tour. Stover joined the welter of honeymooners, space-hands, clerks on holiday and similar rubbernecks. A crowd like that made good disguise, and the gondola would take him to a certain definite jumping-off place for his newly chosen goal.

He sat back in a shadowy corner of the vehicle. The guide lectured eloquently as he clamped shut the ports and took them on a brief dive to show the underwater foundations of Pulambar, fringed with the rare lakeweed that was to be seen nowhere else on Mars. Stover remembered yet again how Buckalew had exhorted him—it seemed centuries before—to work hard for the salvation of Mars by the condenser ray.

Peering from his port, he saw the enclosing water, only a saucerful compared to the oceans of Earth, but here a curiosity and a luxury. He remembered, too, how he had seen in the television a desert where dammed and covered reservoirs were guarded by armed Martian troops as the most precious treasure-vaults of the planet.

He brought back to mind the pitiful folk of other Martian communities, who must deny themselves everything to pay the rates for only a tiny supervised trickle of the fluid which was life to them. All this he could obviate if he finished the ray mechanism—if he ever had a chance to finish it.

"I may die from something worse than water shortage if I don't look sharp," he told himself.

In his role of tourist, he achieved an appearance of attention as a lens-window in the roof was set so that the gaping tourists might look their fill upon the magnified disk of crystal rock that was the hurtling moon Phobos. He did his best to seem casual as they approached the sixth or seventh public building for a supervised inspection.

"Architecture bureau," announced the guide, impressively as though it were something he himself had planned and created. "Pulambar belongs as you know, to one great group

of interests. Every building, small and great, rich and simple, must be maintained by that company. Pulambar being Pulambar, everything must stay at its best and most beautiful. No repairs are skimped or delayed anywhere. Look about you!"

LEAVING the gondola, they entered a lofty room fitted as a main office. Around the sides were desks at which workers mostly Martians, toiled at reports or instruments. Tourist parties being frequent here, no attention was paid to the intruders. The guide marshaled his charges around an alterlike stand in the center of the floor, on which glowed something that at first glance seemed a luminous birthday cake with myriad candles. A second look revealed an exquisitely made miniature of a group of buildings. "A model of Pulambar," breathed someone, but the guide laughed in lofty negation.

"It's a three-dimensional reflection, an image. Here, focused by an intricate system of televiso rays, is an actual miniature image of the city. Observe the detail of buildings and towers. Look closely and you will see actual movement of gondolas on the little canals, and flying specks in the upper levels, denoting aircraft."

It was so. The sightseers stared raptly. Even Stover, his mind filled with other things, was impressed.

"If we could see microscopically," went on the guide, "we'd even make out ourselves standing inside this building. And yet this is only an image, a concentration of light rays." To demonstrate, he passed his hand through the gleaming structure. "This miniature keeps before the attention of the Bureau the city's state of affairs, showing if anything is wrong in building or service. For instance—"

His forefinger hovered above one of the tiny towers, a jewel-delicate upward thrust. Malbrook's tower!

"See that bright point of light? Something is wrong. And," the guide's voice shifted to a dramatic bass, "it happens to be something of grim tragedy. That, my friends, is the spot where the awful explosion-slaying of Mace Malbrook took place recently. The speck of brilliance shows that repairs are needed there. This is to be done right away—now that the police relinquish the place."

The tourists hung on his words. Stover glanced to a bulletin screen, where work-details were posted. It was as he hoped. Halfway down were three words:

MALBROOK TOWER—GIRRA

Malbrook's tower was to be serviced by a worker named Girra. The time was posted, too: tomorrow morning, very early. The rest of Stover's problem solved itself very easily.

The boredom of the desk-workers helped. None saw him slip away from the tourist throng at an opportune time, dart into a dark doorway and

[*Turn page*]

Asthma Mucus Loosened First Day for Thousands

Do recurring attacks of Bronchial Asthma make you choke, strangle and gasp for breath? Are you bothered so bad some nights that you can't sleep? Do you cough and cough trying to raise thick strangling mucus, and strain so hard you fear rupture? Are some attacks so bad you feel weak, unable to work? Are you afraid of colds, exposure and certain foods?

No matter how long you have suffered or what you have tried, we believe there is good news and palliative hope for you in a splendid medicine which was originally a doctor's prescription but that is now available to sufferers at all drug stores under the name of **Mendaco**.

Mendaco usually works very rapidly because it contains ingredients intended to help nature loosen thick, strangling excess mucus. And you know from your own experience if you can just raise that strangling phlegm you can sleep well, breathe deeply of God's fresh air and not feel like there was an iron band around your chest crushing out your very life.

Money Back Guarantee

Mendaco is not a dope, smoke, injection or spray, but is in pleasant, tasteless tablets. Formula on every package. In fact **Mendaco** has proved such a great palliative success for thousands suffering recurring choking, strangling symptoms of Bronchial Asthma that a printed guarantee with each package insures an immediate refund of your money on return of empty package unless you are completely satisfied. Under this money back guarantee you have everything to gain and nothing to lose, so ask your druggist for **Mendaco** today and put it to the test. **Only 60c.**

down into the lower regions of the repair department.

Here, along a bench, sat metallic, grotesque figures—robots off duty. Each bore on its chest-plate a switch by which the mechanical semblance of life could be turned off and conserved when the robot was not in use. Here, too, were benches with racks of tools, stacks of spare parts. Stover, who knew machinery well, went to work confidently. Selecting a wrench, he examined robot after robot, seeking the one which bore the name, in Martian and Terrestrial characters: Girra. He found it.

This was Girra's helper. As its master was off duty, so also was this robot. Quickly Stover unbolted its front, and from inside the torso unshipped great quantities of springs, wires, wheels and other works, rapidly distributing them in the proper heaps of spare parts. When he had completely emptied the shell, even to the big mittenlike hands, he got into it as though it were indeed the suit of ancient armor it so resembled.

He had trouble clasping the jointed arm and leg pieces and the helmetlike head upon himself, but he finally managed. Then he loosened the radium lamp from its frontal fastenings a bit, to give himself a little space through which to see. At last he sat on the bench to await the Martian who owned this robot.

CHAPTER IX

Scene of the Crime

THE police officer on duty in Mace Malbrook's reception hall made disgusted gestures to quiet all his interrogaters.

"Now there's another of you pests at the door," he groaned. "Why can't regulations keep a murder spot from being all cluttered up with High-tower people who wangle special passes?"

He crossed to the door and opened it. "Thank heaven, this is somebody with legitimate business," he growled.

"Right," said the Martian outside. "I am Girra, from Arrchitecturre Burreau, come to ssurrvey damage and esstimate rrepairrs. Alsso my helperr."

"I was told to admit only one man," said the officer. "Your helper must go back."

Girra snorted in the midst of the petal-like foliage that covered his cranium. "My helperr iss a rrobot, not a man." His tentacle gestured to where, behind him, towered a tall, jointed figure of silvery-plated metal.

"All right," granted the officer, and stepped out of the way.

In waddled Girra, and behind him stumped the grotesquely human structure, its jointed arms loaded with instruments, tool-cases and notebooks. Robots were too common in Pulambar for this one to attract much attention.

When Girra and his companion had entered the wrecked chamber, Reynardine Phogor was first of the four visitors to speak again.

"Mace constantly mentioned a will," she told the officer. "It's here somewhere, and it leaves me a controlling interest in his affairs. As his intended wife, I have a right to search for it. That explosion couldn't have blown it out of existence. Perhaps—" And she glared across at Brome Fielding.

"If you suggest that I destroyed it for any purpose—" began Fielding.

"Oh, short it," pleaded the officer. "All requests or complaints must be made to Special Agent Congreve. I told you he'd be here any time."

"Then why doesn't he hurry?" rumbled Phogor from his seat beside his stepdaughter.

The fourth civilian visitor, Amyas Crofts, kept silent. He looked more haggard than ever, and more savage.

All these things Stover saw and heard through his robot disguise. He tried to assimilate every word, at the same time being helpful to Girra and maintaining his machine impersonation. It was a difficult task, but he succeeded.

His previous visit to Malbrook's apartment had been too full of stress and excitement. Only now was he able to observe and estimate.

The room, made cube-form of metal, was bulged in all directions as though it had tried to become spherical.

Only the strength of its material and fastenings had kept it from ripping to shreds. As to that, only the solidity of the door-panel had saved Stover's own life. The furniture was badly wrecked, even its metal frames being twisted and splintered. Prrala, decided Stover, had been able to live for a few more moments only because Malbrook must have been standing between him and—and what?

The killer must have been tall, blond, and dressed in gold, to have been identified as himself. Stover scowled perplexedly inside the metal cranium of his disguise.

GIRRA was investigating a round hole, little more than thumb-size, on the forward wall. "Ssmall wrrench," he ordered, shooting out a tentacle.

Stover found the desired tool in a box and passed it over. With it Girra loosened the device, the mouth-rim of a ventilator tube. Inside was a tiny fan to blow enough air through so small an orifice. The tube itself was left whole behind the damaged wall, for it would not pull out.

"Rray," commanded Girra, and Stover found him a metal-solvent ray projector. Skillfully Girra cut away an area of the plating.

The ventilator was revealed, a down-curved tube, like the trap of a lavatory. At the lowest point was one of Malbrook's protective devices, a liquid solvent for any poisonous or smothering gas. Girra tested it by thrusting in a flexible probe, which came out wet.

"Ventilatorr iss in good orrderr," he announced.

As he turned away to other surveys, Stover dared move close to the opening and investigate for himself. The ventilator, he saw, fastened to another tube that led through the outer plating to Malbrook's hall.

"Why do you loiterr therre?" Girra was demanding. "Iss ssomething wrrong?"

Too late, Stover realized that robot helpers are supposed to be above curiosity or individuality of any kind. If Girra considered that something was faulty in his mechanism and started to remove a plate to rectify it —but the Martian, coming toward him, was suddenly attracted to the piece of plating he had cut away from the wall and which now swung loose by the rim-attachment of the ventilator tube.

"What iss thiss sstain?" he asked aloud. "It sseemss local. The patrrol chemisstss have overrlooked it. Chemical kit!"

Stover handed the kit over. Girra daubed on some liquids, stirred and fumbled, noted the reaction, and made another slurred pronouncement:

"A carrbohydrrate of peculiar prroporrtion. A ssynthetic that apprroximatess Terrresstrrial rrubberr. Melted elasscoid, perrhapss." He confronted Stover. "Now, then, rrepeat back to me thesse findingss."

Evidently the work-robot also served as a sort of stenographer, receiving spoken words and keeping them like notes on a dictograph. Stover had listened with both his hidden ears, and was able to comply.

"Ventilator in good order," he repeated. "Stain of carbohydrate resembling synthetic rubber, probably elascoid."

But he was unable to duplicate Girra's Martian accent with its doubled *s* and *r* sounds. Girra was half-intrigued, half-upset.

"Have thosse Burreau mechaniss fiddled with yourr sspeech-vibrratorr?" he demanded.

"They have fiddled," replied Stover on inspiration, thankful that his voice echoed inside the metal-headpiece like that of the average speaking robot.

"Then they sshall hearr frrom me," promised Girra balefully. "Only I sshall sserrvice my helperr herreafterr." He turned back to his work. "All innerr plating of thiss aparrtment to be rremoved and rreplaced. Lessserr injurriess may have affected adjoining aparrtmentss. Come."

THEY returned to the outer hall. Girra paused to examine the doorway from which the panel had been blown away.

"New jamb needed herre," he announced. "Had not that rroom been sso sstrongly made, thiss whole towerr might have been wrrecked."

Stover should have been paying attention like a good robot, but at that moment new figures entered. Congreve came first, grim and trim and masterful. Behind him came Buckalew, in brown velvet-faced tunic and half-boots, sober-faced and a trifle worried in manner. The four visitors all started toward Congreve at once.

"Mace Malbrook's will—" began Reynardine.

"My stepdaughter's interests—" boomed Phogor at the same time.

"Chief, these High-tower swells are driving me—" complained the officer on guard.

"If you haven't recaptured Stover by this time—" threatened Fielding.

All this made deafening confusion. Throwing up his hands, Congreve fairly roared a command for silence. It fell, and he spoke coldly.

"I told Stover himself, before he escaped, that you idle-richers had things too much your own way, and that I was going to show, in this case, that the law is some steps higher than money. If any of you think you're running this show for me you're wrong. I don't know what authorities got you passes to this place, but I declare them no good.

"Your interests all around will be looked after to the best ability of the police department, but none of you are more important than the capture and punishment of the murderer. Now get out, all of you except Buckalew."

"How does Buckalew enjoy a privilege that's denied us?" wrathfully bellowed Phogor.

"It's not a privilege," replied Congreve with a frosty smile. "If it will help clear this place, I will inform you that he's under suspicion as Stover's friend and host, and unable to explain his whereabouts on the night of the killing."

Amyas Crofts, who had not joined the confusion, now addressed Congreve. "Are you aware, sir, that Miss MacGowan has disappeared? I went to her lodgings an hour ago, and she was gone. Nobody knew when or how she had left, or where bound. With Stover at large, I'm afraid for her."

"Save your fears," called Bee MacGowan's clear voice as she entered.

All gazed as she walked up to Congreve.

"They said at your headquarters that you were here," she said. "I come to give myself up."

"Give yourself up!" echoed Buckalew, Congreve and Crofts together.

She smiled quietly, and nodded.

"I must make an admission," she went on, as if reciting. "I said once that I came here to interview Mr. Malbrook just at the time of his death. The capture of Mr. Stover took your minds off me without further questioning. Prrala, before his death, tried to say that someone had come into the apartment during his talk with Malbrook. I am that someone."

More silence. Congreve broke it.

"Do I understand," he said, "that you are confessing to the murder?"

"I neither confess nor deny," the girl answered, almost primly. "You are a criminologist. Find out for yourself."

"You're under arrest," Congreve told her.

CHAPTER X

The Second Explosion

GIRRA, finishing his work, returned to the outer balcony where his flying machine was moored. But he did not enter it at once. Instead, he selected a wrench from among his tools and turned upon the robot helper whose peculiar behavior he diagnosed as faulty mechanism.

"I darre not trrusst you in the flyerr while my attention iss occupied by operrating the mechanissm," he addressed the metal figure. "I had betterr examine yourr worrkss now, fix them if possible, or put you temporarrily out of commisssion if not."

He paused, out of patience. His servitor was actually retreating before him. "Sstand sstill!" commanded Girra, and pursued.

Stover backed up, thinking hard and desperately. Then he could back no farther. Girra had herded him into a corner, close against the railing.

The Martian extended the wrench, fumbling at one of the bolts that held Stover's disguise-shell together.

A twist, a tug, and his secret would be out—Girra would perceive that inside the apparent robot was, not a mass of mechanism but a living Terrestrial, very much wanted by police. And Stover did not care to be arrested just now. He had other plans.

Because he must, he put forth one hand in its metal sheathing and snatched the wrench from Girra's grasp. The Martian mechanic retreated in turn, dumbfounded beyond speech. Then, as Stover made a threatening flourish with the wrench, Girra dropped the kit of tools he carried and retreated toward the entrance to Malbrook's apartment.

"Help! Asssisstance!" he squalled. "My rrobot hass gone out of contrrol!"

He was gone, out of sight for a few moments. In that precious time Stover carried into action a quick plan of misdirection. From the fallen toolkit he snatched a thin, strong line, knotted one end to the railing and threw the other end free into the abyss below. Then he ducked back into a shallow corner as Girra rushed forth again, followed by the mystified and impatient policeman who had kept guard in the vestibule.

"Now then, now then," this policeman was grumbling, after the manner of policemen generally throughout all worlds and ages. "What happened, you say? Your robot—where is your robot?"

Girra ran to the railing. One tentacle caught the tethered end of the line.

"It hass climbed down thiss line!" he cried sagely. "Climbed down to lowerr levelss and escaped!"

"Never heard of a robot doing that," commented the policeman. He went to Girra's side, and also peered down. "Huh!" he grunted. "That's what comes of too much clockwork in those babies. They get into wild messes. We'd better call for Congreve."

They entered the vestibule again.

At once Stover ran to the moored flyer, got in and went soaring away.

Girra got back to the Bureau office in a hired vehicle. The mystery was deepened when there came a report from a far rooftop. An Architecture Bureau ship had landed there. Whoever had flown it was gone. Inside was a robot shell, with no machinery. Girra, smarting from reprimands by Congreve and his work superior, sought furiously for the culprit responsible for this state of affairs. He failed to find him because he did not know where and how to look.

THE culprit in question had gone straight to the office of Special Agent Congreve. When that intelligent officer returned from the Malbrook tower Stover stood forth to give himself up.

"I'm doing this," said Stover, "because I want to clear up things in my own way. You were close to arresting me under suspicious circumstances not long ago. I didn't want that, but a free surrender is different. Well, why don't you put me under arrest? A little while ago you were even offering a big reward for me."

"Mr. Brome Fielding offered the reward, not the police," replied Congreve, after a moment of enigmatic meditation. "Anyhow, Stover, we've changed our minds about you. The finger of suspicion has veered away—"

"Toward Bee MacGowan."

"I answer no questions," said Congreve, thereby admitting that Stover was right, "and I don't commit you to prison. I only desire that you remain in Pulambar. In fact, I'll make sure that you do. Hold out your left hand."

Stover obeyed, and upon the skinned and abraded wrist Congreve snapped a bracelet of the sort Stover had already worn. Carefully the officer fitted the thing, so that it fitted almost as snugly as a noose of cord.

"You seem to have shaken one of these things off," he observed. "You'll not get rid of that one, Mr. Stover. And I don't think I have to tell you about the peculiar and unpleasant properties of this little device. When things cool off, and if you stay in the clear, I want to hear from you just what happened since I saw you last."

"That's a date," agreed Stover. "Now may I see Miss MacGowan?"

"You may not." That was even more of an admission that the police were holding her.

Stover shrugged and left.

He felt that he saw through Congreve's new attitude toward him. Bee MacGowan had become the chief suspect while he, Stover, was only under mild suspicion. Either that, or Congreve had failed to heap up enough evidence to convict Stover. Bee MacGowan had already half-confessed as the murderer. If she proved innocent, Stover in the meantime might do more to convict himself. That was why he was left free within limitations. Clever man, Congreve.

Meanwhile, Bee MacGowan had complicated matters even more than the police considered. Yesterday Stover had escaped brilliantly and daringly. Now he had wanted to surrender, rebelling at the thought of retaining his freedom at the hands of the girl. He told himself this was not a romantic regard for her, but only what any self-respecting male should do.

She was wrong in taking responsibility for the quarrel, the murder, and Dillon Stover's subsequent plight. True, the fight had started over her, but it might have started over any passably attractive girl, Malbrook and Stover being the men they were. Beyond that, Stover wished she had sat tight and let him do the thinking and fighting.

"Strong-headed, but a girl in a million," he estimated her to himself. "No, in a million million. She feels that it's her duty to take the fall, I suppose, but I wish she hadn't surrendered. The charge would be bound to break down against me or any other innocent person."

That new thought flashed like light in his mind. It was a rationalization that must have come to Bee MacGowan. She had invited arrest and indictment for the sake of giving him freedom—because she was really innocent. She had courage to risk trial on those grounds.

"I believe in her!" he decided. "I'll make the rest believe in her, too. Meanwhile, what am I mooning about? The real killer's swanking around free. I'm supposed to be after him. That," he told himself with all the assurance in the world, "is what she set me free for—to clear us both and punish a cowardly assassin."

HE reached a vestibule-restaurant, built like a great glassed-in balcony hanging high on the cliff of the same building that housed Congreve's headquarters. Sitting down at a withdrawn table, he called for a late breakfast and a wireless telephone. Between bites, he contacted Buckalew's apartment. The hired robot servitor answered metallically. Then came the voice of Buckalew.

"Dillon, my boy! Don't tell me where you are—the police are looking everywhere for you."

"Not they," replied Stover. "I just tried to give myself up to Congreve. All he's doing is to hold me close to Pulambar. Bee MacGowan is the one they're working on now."

"I was present when she was arrested," Buckalew informed him.

"So was I," Stover admitted. "Inside the shell of that Martian's robot helper—why gulp like that, Robert?"

"I didn't gulp, Dillon. I never do. So you were disguised as a robot? Remarkable. Only somebody close to your grandfather could have thought of that. As to being held in Pulambar, so am I, the Phogors, Amyas Crofts, and one or two others. If you're not under danger of arrest, Dillon, come home where we can talk more fully."

"As soon as I've finished eating," promised Stover. "I have something of interest to offer, a theory of Bee MacGowan's innocence — there, you gulped again!"

"It was you that time," charged Buckalew. "I heard you plainly. Here, don't ring off yet."

"I heard a click, too," said Stover. "Maybe some third person was tuned in on our wave-length. "I'll come to you at once, Buckalew. Wait there for me."

"Take care of yourself," admonished Buckalew.

Finishing his breakfast, Stover sought an outside balcony and hailed a flying taxi. The driver was the same

who had served him on the night of the murder. He stared at Stover in astonishment.

"Say," he accused, "the law wants you. There's a reward—"

"Not any more," Stover shut him off. "I'm not on the preferred list at headquarters."

But the driver insisted on a quick radio-phone conversation with police before he would listen to Stover's directions.

Flying back and landing on the balcony of his lodgings, Stover had a sense of unreality, as though he had been gone for months. Enough adventure had befallen him to fill a month, at that. Stover pondered a moment on the relativity of time's passage. Then he went in.

"Robot!" he called. "Get me some fresh clothes. And where's Mr. Buckalew?"

No answer. The front room was dim, but not dark. A couple of lesser radium bulbs still burned. By their light he saw the robot leaning against a wall.

"I gave you an order," said Stover sternly. "Why don't you obey it? Clothes, I said."

The robot did not move. He crossed the floor toward it, putting a hand on its shoulder-joint.

THE thing seemed stuck to the wall, as though bolted there. Stover exerted his strength, but could not budge it. He braced the heel of his left hand against the wall to get more leverage, and felt a tug at his wrist. Congreve's bracelet seemed trying to fasten itself beside the robot. Stover jerked away.

"Magnetism. The metal wall's magnetized!" Again he lifted his voice. "Buckalew! Aren't you here? What's going on?"

Turning back toward the center of the room, he saw Buckalew for the first time. His host was seemingly lounging in a corner opposite. Buckalew neither moved nor spoke.

"Don't tell me they've magnetized you, too," cried Stover impatiently. "Speak up, what's happened?"

He took a step toward his friend. At the same time, there was a crash at his elbow. The robot, evidently released from its magnetic bonds, had fallen forward and lay writhing, trying to recover itself.

Stover bent and helped the metal servitor to its flat feet. Then Buckalew's voice was raised in a warning shout that filled the room:

"Look out, Dillon—danger of some kind! *Duck!*"

So startled that he forgot his touchy mystification, Stover released his hold on the robot's arm and again turned toward the corner opposite. Buckalew was falling as the robot had fallen, but more slowly and gently, almost floating downward toward the floor.

"Just what's going on here?" began Stover.

Something dark flashed upon him, seized him and hurled him flat. A moment later, it was as if lightning and thunder had concentrated in the room.

Dillon Stover's senses were fairly ripped out of him.

CHAPTER XI

And Then the Third

STOVER'S hearing came back first; his ears rang and roared. Then his feelings; he ached from head to foot. He opened his eyes to a scene of confusion that still blurred and quivered before him.

"Sit up and drink this," Buckalew was commanding him.

Stover got up slowly. Buckalew fastened a silver collar with one hand, while the other extended a glass.

"Thanks," said Stover, sipping. The drink was full of bite, but it cleared his head and steadied his knees. "How long was I like that?"

"Quite a while. Long enough for me to change my clothes. My others were almost torn off me by the blast."

Sure enough, rags of the brown fabric lay on the floor. Stover glanced sharply at Buckalew. Wasn't it a trifle callous of the other to think of dressing before giving aid to an injured man? But Buckalew gave him

no opening to complain, gesturing instead to the tumbled furniture and the soot-fogged walls of their once splendid parlor.

"Not quite as powerful an explosion as the one at Malbrook's," went on Buckalew weightily, "or it would have torn off the whole top of this tower, and blown you to atoms."

Stover, swiftly regaining his full strength and sense, now looked down at his own clothes. They were not damaged in the least. Buckalew spoke true words, but enigmatic ones. First of all, how much did Buckalew know about the Malbrook death-blast that he was able so glibly to compare this one with it? Second, why did he speak of Stover only as being "blown into atoms?"

Hadn't he, Buckalew, been in danger as well? Or had he perhaps operated and directed the danger from a position of safety? The thought seemed ungrateful. Buckalew had been the friend of Stover's grandfather, was now the friend of Stover.

"It's got the poor servitor," the younger man made reply, pointing to the shattered mass of metal that had been the robot. "I suppose he got between me and the blast. If so, I can thank a robot for saving me."

"Yes," agreed Buckalew, in a tone that seemed almost bitter. "You can thank a robot for saving you."

"You sound as if you're sorry!" Stover could not help protesting. "Tell me just what happened here. You were here waiting after you answered my phone call. What happened in the meantime?"

"I haven't the slightest idea," replied Buckalew.

"But you must have!"

"I can only say again that I do not. My—my mind went blank."

Stover eyed him narrowly. "You mean, something stunned you?"

"Yes, something like that."

Stover could not see any sign of a cut or bruise upon Buckalew. His hair was as sleek as ever. Only his manner was weary and solemn. Again Stover made a deliberate effort to banish suspicion. He volunteered the story of his recent adventures, finishing with an account of how he had come home to find the robot servitor stuck by magnetic power to the wall and Buckalew himself motionless in a corner.

"I don't remember being in the corner," said Buckalew when he had finished. "I was—overcome in my dressing-room back there. As I remember, I regained consciousness just in time to sense danger and warn you."

"What danger?" Stover demanded. "You knew there would be an explosion?"

IF he hoped to startle or trap Buckalew, he was disappointed. The other made steady reply.

"All that I knew was that I had been attacked in some way, and that you had come. After that, the bomb or gun or whatever went off."

They inspected the room, setting up the furniture again and checking damage. Stover ran for a chemical kit, testing the atmosphere that still had a slight murk.

"Old-fashioned nitroglycerin, as in the other case," he announced. "And here, on the floor—"

He knelt in the corner where he remembered seeing Buckalew. There was a stain there. As Girra had done in his presence only a few hours before, Stover made tests. This, too, yielded a trace of synthetic rubber.

Meanwhile, Buckalew was talking on the radio phone.

"No," he was saying, "nothing at all. A trifling accident, no damage. Not worth your notice." He switched off and turned toward Stover. "A police call. Some neighbor gave an alarm."

"Why not call them in?" almost shouted Stover. "Do you want to hide anything from them?"

"Yes. Don't you?" And Buckalew crossed the floor to him. "You want to expose the real murderer by yourself—you told me that. I thought I was helping you."

That should settle suspicions, even if Stover lyingly told himself that he had none. Buckalew continued:

"Undoubtedly the attempt was aimed at you by the real murderer. He will think you destroyed until he hears otherwise."

"But a report to the police, not necessarily public—"

"Have you the slightest doubt that the aforesaid murderer doesn't know everything the police know? For instance, was any public announcement made of your release from the order of imprisonment?"

"No, but we both heard noises that suggested someone listening in on our phone wavelength," reminded Stover, scowling. "That was the probable tipoff."

"Why would an enemy listen in unless he knew you were free and would call me here? No, Dillon. The murderer has access to police records and secrets."

Stover nodded. Buckalew was right. "Then," he announced, "I can limit the suspects to people in pretty high places—the Upper-tower set. People like Malbrook, himself, his partner Fielding, his fiancée Reynardine Phogor, or her stepfather, the Venusian. Or even Amyas Crofts."

"Or me," added Buckalew with the slightest of smiles.

Stover jumped and stared. Buckalew's smile broadened.

"Or me," he repeated. "I'm an old-timer in Pulambar. I have friends and a position. I might be able to get an in at police headquarters. Don't forget that Congreve himself has been conferring with me lately. And I have as good a motive for killing Malbrook as any of the others."

"And a motive for trying to kill me?" asked Stover in spite of himself.

Again Buckalew smiled. "You wouldn't expect me to tell you that, if I wanted to kill you and had failed. Well, to sum up, you have reason to suspect me, and I to suspect you. After all, we were both present when this second explosion was touched off."

"You don't believe in me, then?" demanded Stover.

BUCKALEW cocked his head, apparently trying to remember something. At last:

"In an ancient but most readable work, called *Alice in Wonderland*, the heroine is addressed by a unicorn. Know what a unicorn is? Well, this one said, 'If you believe in me, I'll believe in you. Is that a bargain?' All right, Dillon, is it?"

He offered his hand. Dillon took it, regretting whole-heartedly that he must make a secret reservation.

"Your little friend Bee MacGowan is cleared by this," Buckalew resumed. "She's in prison even while this murder attempt is made."

"Let's tell the police that," said Stover stepping toward the phone. "They'll release her at once."

"And probably arrest you again," added Buckalew. "Say nothing. She's giving you a chance to clear her and yourself. Use it."

Stover fell into a silence, almost a stupid silence. In the midst of it the front door opened and two figures fairly dashed in. They came to a halt.

"Mr. Stover—er—" stammered the voice of Amyas Crofts.

Stover felt almost grateful for this opportunity to change the subject. He strode across to the gilded youngster, glaring a challenge.

"Why do you rocket in like that?" he growled. "What do you want here?" A light seemed to dawn inside his head and stop the aching. "Perhaps you didn't expect to find me alive?"

The companion of Amyas Crofts had turned to dart out again, but Buckalew, moving with amazing speed, gained the door and fastened it. Then he turned to confront the would-be fugitive. It was the girl with red-dyed hair whom Stover knew as Gerda.

"Let me out," commanded Gerda as from under her cape she whipped an electro-automatic pistol.

Without even lifting an eyebrow, Buckalew seized it and wrenched it from her hand.

"Go there sit down," he told her, pointing toward one of the least damaged chairs. "You might have shot me just then."

Gerda sullenly obeyed, eyes flashing. Meanwhile Stover waited balefully for Amyas Crofts to explain.

"It's this girl," Crofts attempted at last. "Gerda, she calls herself. She came to my apartment, told me she

knew that I was crazy about Bee MacGowan, just the same as you are—"

"Never mind who I'm crazy about," snapped Stover, his blood seething. "Your affairs, not mine, are being looked into. Gerda told you that. What next?"

"She said that if I came here I'd see for myself that there was no more reason to think you'd stand in my way with Bee. When I hesitated, she begged me to come. Said she'd come with me."

"He's lying," contributed Gerda from where she sat under Buckalew's guard.

Stover did not know which to believe. He laid a big hard hand on Croft's shoulder. "I've got a mind to knock your teeth out through the back of your neck," he said angrily. "So you busted in here without asking permission."

"Gerda said it was all right, that you were expecting me," explained Crofts, "and keep your hands to yourself. I'm not so sure you could knock my teeth anywhere."

"Gentlemen," interposed Buckalew smoothly, "you're clouding some rather important issues with these personalities. Dillon, I venture to say that one of these visitors, and perhaps both, thought to find us dead."

CROFTS'S white anger turned to white panic. "Dead?" he repeated. "You think we were going to kill you?"

"He's putting on an act," accused Gerda, and Buckalew waved for her to keep quiet.

Stover had cooled down a trifle, telling himself that the mere mention of rivalry over Bee MacGowan must not be enough to drive him so crazy with wrath. He saw that Crofts wore a bracelet like his. This man, too, would be kept in Pulambar by Congreve for possible further investigation. Let him go, decided Stover, and keep an eye on him.

"Get out," he told Crofts.

The other went to the door, then paused. His eyes gleamed like furnaces. "You're on your own ash-heap," he said. "Some time we'll get together on equal ground."

"Out," bade Stover, "or I'll drop you clear down to the canal level."

Crofts was gone, and Stover walked back to where Gerda sat.

"Buckalew tells the truth. You thought we'd be dead. Why did you come here with Crofts?"

"Because I was paid to," she told him with cheerful irony.

"You mean," prompted Stover, "that you were bringing him here so that he could be framed with the crime?"

"Or," put in Buckalew, "that he was the one who paid you, and you both came to make sure we were dead?"

"That would be telling," Gerda replied to both questions. "Mr. Stover already knows that I'm working for that mysterious blast-killer. I won't deny it. But I'll deny other things. I'm a good servant." She gazed from one to the other of them. "And those hard looks won't get you anywhere, either. I know that Mr. Stover won't hurt me physically, and that he wouldn't let Mr. Buckalew try."

Stover walked to a closet and opened it. There was barely room inside for a person to stand comfortably. "We'll lock you up for long enough to think it over," he said.

With a disdainful smile the girl sauntered across and into the narrow prison. When he had latched the door, Stover looked at Buckalew, who had followed him.

"Well, Dillon?" prompted Buckalew in a clear, carrying voice. "You realize that there is no ventilation in that closet?"

There was plenty of ventilation, but Stover took the cue.

"Of course not," he agreed. "I count on that to change her mind. She'll start to smother, and then she'll talk."

Gerda said something profane from inside the closet.

"What if she lies?" asked Buckalew.

"We'll shut her up again," said Stover.

"Watch here," suggested Buckalew. "I'll make a tour of the rear rooms. We don't know yet what damage has been done there."

Stover nodded agreement, and sat down in the chair facing the closet door.

He had not long to wait. Gerda be-

gan to pound on the inside of the metal panel.

"Well?" said Stover.

"Let me out," she pleaded in a tense, muffled voice.

"Ready to tell us what you know?"

"No. I daren't. But—there's something in here with me!"

Stover laughed. "It's too dark for you to see anything."

"I felt a touch—there it is again." Her voice rose shrilly. "Stay away from me, whatever you are, or I'll smash you!"

The door shook with a deafening boom.

Even before Stover could unfasten the latch, he knew what had happened inside. He flung open the door, and the body of Gerda pitched limply out into his arms.

CHAPTER XII

Fight and Fall

STOOPING, Stover laid Gerda at full length upon the metal floor. Her eyes were shut, and her face completely clear of all cunning and mocking expressions, as if she realized that such things would avail her no longer. She was bruised and the back of her skull was driven in, but there was surprisingly little blood.

"A small explosion," said Stover aloud. "First that shattering one at Malbrook's, then a lesser one in this parlor, and now one quite light in the closet. Robert, come here!"

"I am here," said his friend behind him. "This is a bad mess, Dillon. I suppose you realize that there would be very little chance of clearing yourself now that someone else has been killed in your presence—and a police spy at that."

"Did I tell you she was a police spy, or do you know that as a man-about-Pulambar?" demanded Stover. Then, without waiting for a reply: "All I can say is that I'm innocent."

"And all I can say is that I know you are," Buckalew assured him.

"How do you know?"

"I said once that I'd believe in you," Buckalew reminded him gently, "and I meant it. Cover her over with this cloak. Now, to look inside the closet."

They both did so. Stover saw things that had become almost familiar—a murk of pungent nitroglycerine vapor, a stain that would certainly prove to be traces of synthetic rubber. He saw, too, a small hole, a ventilator like the one at Malbrook's, but in a corner of the floor. He poked a finger into it.

"What's below this place, Robert?"

"Why, nothing. Or nearly nothing. This tower is on a framework of steel girders, you know. Nothing below us for hundreds of yards except criss-crossed cables and iron bars."

Stover raced out onto the balcony. Amyas Crofts was not there, nor any moored flying vessel. Stover threw a leg over the barred railing.

"Here, Dillon," called Buckalew anxiously. "What are you up to?"

"I'm going to have a look beneath us," replied Stover. "If I can swing down below just a few feet, I can see clear under from front to back."

"You think the murderer might be down there?"

"I do," said Stover, and swung his other leg over. He was clinging to the railing with both hands, his toes finding a ledge barely two inches wide. He tried to keep his eyes and thoughts from the abyss below. If he fell, he'd bounce off the lower roof and drop into a deep of two miles and more to the canal level.

"Let me go down," offered Buckalew. "You'd better not risk it, Dillon. Ticklish work, climbing around."

Buckalew should have known that such talk would force him to the try, reflected Stover. Perhaps Buckalew did know. The young man's temperament would never let him pause now. Grasping the rail in both hands, he lowered himself a trifle, one foot extended to grope for another toehold.

"If you insist," Buckalew added, "I can help you."

He ran back into the parlor, and brought out a long dark cord of velvet fabric. "This was used to bind the drapes at the windows," he said. "It's strong enough to bear your weight on Mars. Take hold, I'll lower you."

Stover had to accept. Indeed, he could not go down without such help. He gripped the soft, tough cord, and Buckalew began to pay it out.

A dozen feet or so Stover descended like a bucket into a well. There was nothing below save the thin air of Mars, nothing to cling to save this velvet line held above by one he was not sure he could trust. Then he was below the floor-plane of the apartment, looking into an openwork mass of structural metal.

He swung inward, catching a girder in one hand.

"Slack off a little," he called up to Buckalew. "I'm all right. Make the rope fast so that I can swarm up again."

Like a sailor among rigging, Stover worked his way in among the struts, beams and cross-pieces. He found footing upon a horizontal girder, less than ten inches across. A higher and smaller bar of metal served as a sort of hand-rail. He moved in gingerly fashion to a point beneath the closet where Gerda had been overtaken by death.

"Hello!" he exclaimed, though he did not think of anyone hearing him. "Here's something caught just inside. A bit of—"

With the forefinger of his free hand he dug it out of the ventilator opening. It was a bit of elascoid, thin as silk and flexible and stretchy as the finest rubber. The form of it was tubular. It was the size of his forefinger and the length of that forefinger's two upper joints. He sniffed at it and inhaled a pungency like that of the explosive reek. But how could such a limp fragment be a weapon?

He tucked it into a pocket of the stolen tunic he still wore, preparatory to turning carefully around to retrace his steps along the girder.

"Stand right there," came a penetrating whisper.

Stover finished the turn, and looked back the way he had come.

Upon the girder, not five feet away, stood a figure as tall as he, but as vaguely draped as a ghost in a voluminous mantle of neutral gray. Over the head was a loosely folded veil, with no holes for eyes or nose. Apparently it could be seen and breathed through from within. One hand poked from under the robes, heavily gloved. That hand pointed a pistol-form ray thrower straight at the pit of Stover's stomach.

"Stand right there," repeated that genderless whisper. "You have poked too close to an awkward truth, Dillon Stover. Which death do you choose, the hard one or the easy?"

The mention of death did not frighten Stover. Aside from the fact that he had considerable personal courage, he had been in too much danger for the past sixty hours to be much shaken now. But he recognized that his chance of escape and pursuit of his quest had grown slim and feeble. He stood still, tense, watchful, wondering if his already overworked luck would provide him with one more straw at which he, a drowning man, might clutch.

"The hard death," he said, "because it will involve you."

THE robed one moved a step closer. Stover heard the clang of heavy metal soles. This person was standing upon stiltlike devices to lend false height.

"Think what you say," came the whisper. "You are asking me to burn you in two with this ray. Better a simple plunge down with quick oblivion at the end."

"Not a bit of it," flung back Stover. "I'm here on Mars for a specific purpose. Two specific purposes. Primarily, to bring water back and touch this poor dried-out world into something like life again. That brought me to Mars, and it's a thing I won't let go of easily. Secondarily," and Stover's voice grew fierce, "there's the job of bringing you to justice. It'll be done."

"It will not be done," came the sneering denial. "You die, here and now. If I burn you with the ray—"

"If you do," finished Stover for his threatener, "my body will drop down and be found below by the police. I'll be set down as a murder victim. Understand? It'll be a clue against you, whoever you are hiding in that fake-melodrama robe. You'll be just a little

closer to discovery and destruction. Go on, scorch me with your ray. I'd not ask for mercy even if you were going to cook me to death by inches."

"Wait," said the other. "You are wise, Dillon Stover, in your deductions about me and my intentions. You rouse my admiration. I am tempted to give you a chance for life. A fair fight, eh?"

The gloved hand lifted and gestured, the ray thrower's muzzle went out of line. Stover sprang forward on the girder, forgetting how precarious was his footing and balance, and struck hard with his right fist into the center of that veiled face.

His knuckles felt as if they would explode—the veil also hid some kind of metal visor that helped muffle and disguise the whisper. There was a swirl of draperies as the tall body swayed back before that mighty buffet. But there was no knockdown, no plunge from the girder.

"I hoped that you would strike," came the whisper, exultant this time. "My shoe-soles have magnets, holding me to this metal girder."

Pulling itself erect again, the robed thing clubbed him with the muzzle of the ray thrower.

Stover did not duck quickly enough. A blow glanced on the side of his head. He reeled, and there were no magnetized shoe-soles to save him. He lost his footing, plunged from the girder. Falling past it, he tried vainly to clutch it with his hands.

He was falling headlong. Down below, seen through cross-angled metal bars and cables as through an intricate web, was the distant broad roof that upheld the scaffolding.

"I'm done for," he told himself. "Victim number four of this wild beast of Pulambar. And my body will look like the victim of accident or suicide. Won't even supply a clew."

He struck heavily.

CHAPTER XIII

Half a Key

FORTY feet below the girder, two cables forked from a common mooring, making a narrow, spring-armed V. Into the angle of that V Dillon Stover had fallen. Even on light-gravitied Mars it was a heavy tumble and the impact of Stover's body made the two cables snap apart, then back. He was caught at the waist like a frog caught in the beak of a stork.

Lying thus horizontally, feet kicking and head dangling, Stover wondered whether to be thankful or not. He seized the cables and tried to push them apart, but they were tough and tight-squeezing, and his right hand had sprained itself by striking that veiled metal mask. He relaxed, saving strength. As he did so there was the snarling *snick* of an MS-ray cutting through the air close to him.

He looked up. The draped figure knelt on the girder and levelled the ray thrower at one of the cables. The metal sizzled. Stover's pinched abdomen felt the cable vibrate. Still chary of marking Stover with a telltale wound, the killer above was trying to cut the metal strand that held him and set him falling again.

"I wish you luck!" the young man called, and his swaddled destroyer made a salute-gesture of irony with the ray thrower. Then came a new sound, a whistling, shrieking siren.

Stover looked outward. A plane, a taxi flyer, was hovering and bobbing just beyond the scaffolding. Somehow the drama on the girders had attracted attention. Another plane came, another. The ray above him was shut off.

Stover, cramped and half suffocated, gestured to the pilots of the machines. Pointing to the scissors-like cables that imprisoned him, he spread his hands in appeal for help. One of the planes made a wriggling motion in midair to indicate understanding. But no one seemed to know how to reach and free him.

Stover groaned despite himself. Then, once more a voice from the girder forty feet overhead.

"Dillon, hold tight! I'm going to get you out of that."

It was Buckalew, running along the narrow footpath like a cat on a fence-top. One of his hands flourished a

velvet rope.

Stover tried to call back but he had no breath to do more than wheeze and gasp. Buckalew was lowering the rope. It dangled against Stover's hand, and he seized it.

Now he would be pulled up. All the way? Or would Buckalew let him fall, seemingly by accident? Had Buckalew clambered down out of the tower, or had he merely thrown off the gray disguisings? No time to speculate now. Stover caught the velvet strand. It tightened.

But he was too closely crimped, and one of his hands was injured. The first tug wrenched the rope from him, and Buckalew almost fell with the sudden slackening of the cord.

More sirens. The air around the scaffolding was thick with planes. Drivers and passengers were sympathetic and most unhelpful.

"Chin up, Dillon!" Buckalew yelled above the racket. "I'll try something else."

He rove a noose in the rope's end. This he lowered and snared one of Stover's waving feet. Then he began to pull. Stover shifted in the clutch of his trap, but could not be dragged free.

BUCKALEW sprang backward into space.

He kept hold of the rope, which tightened abruptly across the girder. The sudden application of his hurled weight did the trick. With a final cruel pinch that all but buckled Stover's ribs, the cables released their hold. Then Stover was being drawn up by one foot, his head downward. Buckalew came slowly down at the other end of the rope. The smaller man was strangely the heavier. Drawing to a point opposite Stover, Buckalew caught his friend by the arm.

"Steady on," he bade, twisting the two strands of the line together.

Then, thankfully and triumphantly, Stover and Buckalew climbed hand over hand up the doubled length of velvet. A few moments of rest on the girder, and they walked back along it to where another length of cord gave them a passage back to their own balcony.

To the thronging plane-riders who now closed in, Buckalew had a brief word of dismissal.

"Did you like the show? We're rehearsing an acrobatic turn for next year's society circus on Venus. Not very good yet, are we?"

Then he closed the door behind him. He brought the exhausted Stover a drink, and listened to all that had happened below the floor.

"You say that the disguised one was as tall as you?" he asked at the end of the story.

"Yes, with those false magnetic soles," replied Stover. "He'd have to be built up to be that big. All my suspects are shorter than I am." He measured Buckalew's middling height with his eye as he spoke.

"Why say 'he'?" asked Buckalew. "Couldn't it be a woman, with that whisper, the stilts and draperies. Reynardine Phogor?"

"She might be a killer," admitted Stover. "You seem to think so."

"I didn't say that. I only want her to be remembered. Don't drop any suspects from the list without very good reasons."

"But where could that murderer have p o p p e d from?" elaborated Stover. "The whole scaffolding's open-work. Not place enough to hide even a small person. Yet I turned around and there he—or she—was."

"You said the draperies were gray," reminded Buckalew. "A good color to blend in with the metal. Probably the murderer crouched motionless while you walked right past."

Stover shook his head and rubbed his bruised side gently. "I find that pretty hard to accept, on a ten-inch girder."

"You weren't looking for a human figure," persisted Buckalew. "You were looking for clues—by the way, did you find any?"

Stover's hand crept into the pocket of his tunic. His finger touched the scrap of elascoid. Perhaps Buckalew could help him decide exactly what it was. Perhaps, again, Buckalew knew only too well what it was.

"No," he said. "Nothing at all."

Then his eyes had time to quarter the room, and he jumped up quickly.

"Look! Gerda—her body! It's gone!"

And it was.

THE high-tower set was holding carnival at the Zaarr. The place was packed, nearly every seat and table taken. There was lots of music, and Venusian dancers—frog-women who, grotesque as they were, had yet the grace of snakes. To keep them supple and energetic, a misty spray of water played over the glass stage, water that might cool the parched and dehydrated tissues of many a Martian pauper out on the deserts far away.

Thus in an atmosphere like that of their own foggy planet, the dancers outdid themselves, their gliding gestures moving swiftly in faultless rhythms. Suddenly, with an almost deafening shout, they sprang into the air—and disappeared.

It was a tremendous effect. The water-spray died at once, leaving nothing but luminous air under the play of a pale light. Thunderous applause.

"I know how that is done," Phogor said to his step-daughter Reynardine. "The atom-shift ray. It strikes any material into atomic silence, so that they fade from view. See, the light is being wheeled away. Those dancers, in the form of invisible atomic clouds, will go with it and re-materialize in the green room. Scientifically simple, and very uncomfortable, I hear, to those involved. But the show must go on. Pulambar demands new thrills."

Brome Fielding smiled, as if he, for one, found the new thrill acceptable. Only Amyas Crofts, in a remote corner, glowered.

For he had been looking toward the main entrance, and had seen the arrival of the two new guests who had just come to occupy the last reserved table.

Dillon Stover, towering and handsome in blue and scarlet, made a commanding figure even in that richly decked crowd. Behind him came Buckalew, more somber but quite as fashionable in black and silver. Where Stover's expression was strained and defiant, Buckalew was absolutely calm and unruffled of feature.

Others saw the pair, and stared as fiercely as Amyas Crofts. The Martian who had replaced Prrala as proprietor fumbled over the admission card. Others, including many guests, glowered at the recently jailed young man who returned so nervily to the very heart of society. And one figure swaggered up, a man in the uniform of a space-officer.

"Now I can believe all I hear of you, Stover," said this person in a thick, disagreeable voice. "Only a man who is all brass and no heart would have the crust to come over here."

He was almost as tall as Stover and heavier. His face might have been boldly handsome before dissipation coarsened it. As he spoke, his right hand slid inside the front of his tunic.

Stover met his stare. "Who are you?"

"Sharp. Captain Sharp. Retired. And," the voice grew nastier still, "since you must have come here just to show us your face—"

Turning from Stover, he addressed the crowd that watched as expectantly as it had watched the encounter with Malbrook three nights before. "This man's crust would blunt a rocket-kick!" he bawled. "Twice a murderer, and he coldly comes here." He turned back to Stover. "What have you done to Gerda?"

"Nothing, if it's any of your business," said Stover, fighting to keep his temper.

The coarse face darkened. "I love her—and she's disappeared. You," he leveled a forefinger, "did away with her. Well, you were full of fight once before here. How about fighting now?"

"Careful, Dillon," warned Buckalew. "He's deliberately making trouble."

"Maybe you'll fight for this!" raged Captain Sharp.

HE SLAPPED Stover, open-handed. Then, as before with Malbrook, people were interfering. Among them was one who hadn't been here on the earlier occasion—Congreve. He caught Sharp by the shoul-

ders and thrust him back.

"Don't you High-tower sparks do anything but hit each other?" he asked dryly.

The new Martian proprietor came towards Stover. "I feel, ssirr, that you had betterr go elssewherre. We cannot have ssuch brrawling around here."

"I'm going," growled Stover. "My enemies know I'm still in the running, for lightning to challenge twice in the same place."

They went outdoors, and Buckalew signaled for an air-taxi.

"I've got it!" Stover exclaimed suddenly.

"Got what?"

"The key—half a key, anyway. This is a murder gone wrong. Just now this Sharp tried to force a quarrel on me."

"Probably acting for the murderer," chimed in Buckalew.

"Exactly. It was all fixed up. This Captain Sharp sneers at me and does his best to make a fight of it. That was what Malbrook did. Malbrook's wasn't a chance squabble. He engineered things to make a situation out of which a duel would come. For some reason, I was marked to be murdered."

BUCKALEW gazed at Stover with what might have been critical wonder in his deep dark eyes. "You may be right. But Malbrook was killed first."

"That's it. First a plot to destroy men. Then someone kills Malbrook instead. I wonder who all are involved."

"I can name one," said Buckalew. "Bee MacGowan."

Stover started and tried to gesture the idea away.

"But she was what you fought over, Dillon," Buckalew pursued. "She was at your table just as Malbrook came over and used her to make a scene. I said once not to forget any single figure in this mess. That goes for Bee MacGowan, as well. Here's our taxi."

Stover nodded, but not as a sign of defeat.

"I'll have the solution inside of another day," he vowed.

CHAPTER XIV

Three Calls at Midnight

CONSIDERING that Captain Sharp had just left the expensive and exclusive Zaarr, the sleeping quarters he sought were shabby. They consisted of two small rooms, little larger than cupboards, in one of the lofty, blocky buildings that underlay the high towers among which he had spent a few hours. He entered the front cubicle, and flung himself down in the one chair.

His coarse face bore the look of one angry and worried.

Almost at once his radio phone buzzed. He approached it as a diver approaches a cold plunge. "Yes," he said into the transmitter, "this is Captain Sharp."

"You have failed me," came a cold whisper he knew.

"It wasn't my fault," Sharp began to plead.

"Do not palter. Do not argue. I was there and saw. You handled the situation foolishly. I felt like telling Mr. Congreve the truth about you, that you're guilty of many offenses against the Space Laws, and letting him carry you off to jail. I am through with you now."

"Give me a chance!" Sharp cried vehemently. "I need that money you offered me. Let me meet Stover again. I promise—"

"Your promises are nothing, Sharp. Less than nothing."

A noise behind. Sharp set down the phone and turned.

The door to the rear room, where his bed was located, swung open. A towering shape in blue and scarlet stepped into the light.

Sharp swore shrilly, and his hand dived into the bosom of his tunic. But Dillon Stover's right hand, its sprained knuckles lightly bandaged, leveled an electro-automatic.

"Freeze," he commanded, and Sharp obeyed. Stover crossed to him and with his left hand drew the weapon that Sharp carried in an armpit holster.

The captain found the spirit to answer. "You aren't going to give me anything like a fighting chance, I suppose."

"You suppose correctly." Stover studied him with his bright blue eyes. "Well, Sharp—Captain Sharp, *discharged*—"

"How did you know that?" wheezed Sharp, badly shaken.

"I looked through your papers while I waited here for you. As to how I got in—you were going to ask that next? I hired the room next to you and cut through the wall with an MS-ray. Your address? I got it at the Zaarr, where all guests are required to register. Why did I come? To settle accounts. That handles everything you're thinking to ask me. Now I'll do the questioning."

"You've got the guns," snarled Sharp. "Ask me whatever you want to."

Stover sat down, but did not grant a similar relaxation to his captive. "You were set on me like a mangy dog," he charged. "To pick a fight and kill me. Who hired you?"

Sharp shook his head. "I can't tell you that."

"You mean you won't?" Stover's eyes narrowed, and the pistol seemed to tense itself in his bandaged hand.

"I can't. I never saw the bird." Sharp was suddenly earnest. "Listen, you must believe that. I saw only a big shape wrapped in a cloak, with the face covered."

"Gray cloak? Veil? Gloves? Was it man or woman?"

AGAIN Sharp shook his head. I can't say. He—or she—whispered. I couldn't tell a thing about the voice." He glanced furtively around. "I'm risking my life with every word I speak."

"You're risking your life with every word you hold back," Stover informed him. "When were you given this job?"

"Today about noon." Sharp gulped and his voice trembled. "I came to Pulambar a week ago, hoping to make a connection—a space-job."

Stover nodded. He knew how discredited space-men sometimes signed with outlaw vessels in such big, lax communities.

"The job didn't come through," Sharp went on, "and I was pretty desperate. Then about noon, as I say, there was a buzz at my door bell. In stalked this bird in the cloak and veil."

"Asking you to kill me," supplied Stover. "And you agreed."

Sharp spread his hands in appeal.

A Grim Tyrant of the Future Condemns His Victims to an Amazing Penal Colony Upon the Moon

in

TARNISHED UTOPIA

A Sensational Complete Book-Length Novel

By

MALCOLM JAMESON

COMING IN THE NEXT ISSUE

"I'm broke. I'll starve. Don't I have to live?"

"I fail to see the necessity. And you won't live long if you don't get on with this yarn. Talk fast, and don't lie."

There was no danger of Sharp lying. "I was told that you'd be at the Zaarr tonight—you'd made reservation—and that there'd be an admission card in my name there," he rattled on. "I was told how to pick the scrap by mentioning a woman named Gerda."

"You don't know Gerda?" put in Stover.

"Never heard of her before today." Sharp was almost in tears. "Mr. Stover, all I can say is that I'm sorrier than—"

"You'll be sorriest if you try to fool or forestall me," Stover promised grimly. "And just now, I judge that the whisperer was on your phone."

"Yes, telling me that I'd failed, was through, wouldn't get paid anything."

Stover had relaxed a trifle. Sharp sprang at him. Without rising from his seat, Stover lifted a leg and kicked his assailant in the chest. Sharp fell, doubled up and gasping. Stover laughed shortly, and rose.

"I'm going," he said. "By the way, do you realize your phone never tuned off?"

He stepped to the instrument and spoke into it. "Hello, are you there? . . . I heard the connection break, Sharp. The whisperer's been listening."

Sharp started moaning. "We've been heard. I spilled the dope. Now I'm done for."

"Good night," said Stover, and moved toward the door. Sharp got to his feet. "Wait!! What's to become of me?"

"That's problematical, Sharp. I can't do anything. I carry my life in my hand everywhere I go."

"What had I better do?"

Stover thought. Then:

"Go to police headquarters. Look for a special agent named Congreve. Tell him any dirty thing you've done, and it'll land you in a cell. You should be safe there. Later on, I'll get in touch with you. We may make a deal if you'll talk in court."

REYNARDINE PHOGOR and her stepfather looked up in irritated wonder as the robot servitors in the reception hall buzzed and rasped in protest. There was a clanking scuffle as a robot was being pushed aside. Then a blue and scarlet giant stalked in.

"Dillon Stover!" exclaimed Reynardine.

Phogor's frog-face was distorted with fury. "What new violence—" he began angrily.

Stover gestured for quiet. "I'm trying to help. About the murder of Malbrook and its effect on you."

The girl drew herself up. She was magnificently dressed, with a little too much sparkle. Her fine eyes glittered disdain. "How can you help?" she demanded.

"By turning up the real murderer. That would help you—unless one of you did it." Stover looked at each in turn. "Don't call any robots, Phogor. They'll get smashed all out of working order. Listen to what I have to say, and then I'll go."

Phogor and Reynardine looked at each other. Then: "Say what you wish," granted Phogor.

"It's about this alleged will," said Stover. "You, Miss Reynardine, are very confident of its existence."

She nodded her head, and the light played on its onyx streakings. "I am confident. That is, unless Brome Fielding destroyed it."

"You saw the will?"

"I heard it. You see, it's a televiso record, picturing Mace announcing his bequests verbally. In it he recognized me as his intended wife, and considers me his principal heir-at-law."

"Perfectly legal," seconded Phogor in his mighty voice.

"Would he have kept the will in his fortified room?" asked Stover. "If he did, it's probably destroyed. Everything was smashed by the explosion."

"That may have happened," sighed Reynardine, as though she disliked to shift the blame for the will's loss from Fielding.

Stover asked one more question. "You hate Fielding, Miss Reynardine?"

"That is an insolent remark," began Phogor, but his stepdaughter waved him to silence.

"Why not tell Mr. Stover? All the rest of Pulambar seems to know. Mr. Fielding wants to marry me."

"Oh," said Stover. "And has he ever suggested marriage or made love before?"

She shook her head. "He doesn't put it on an emotional basis. Says that he and I were the closest two persons to Mace, and that we should marry because of that relationship. Rather fantastic. And," she smiled a little at Stover, "I don't find him attractive."

"I think Mr. Stover's unwarranted inquisition has gone far enough," contributed Phogor. "We are both tired. We have been frank. Let him be considerate, and leave us."

Stover bowed, and left.

IN THE reception hall that had been Malbrook's, Congreve and Fielding faced each other above the body of Gerda.

"Thank heaven I asked you to come with me," said Fielding, shaken.

Congreve looked at the corpse again. "It would have been hard to frame you with this. She's been dead for hours. Now tell me again."

"A radio phone call. A whispering voice told me to come here alone. But I had the inspiration, a lucky one, to ask you to come with me. You say this was one of your undercover people? Was she working on this murder case?"

Someone else entered. It was Stover, who gave only one look at Gerda. To Fielding he said: "They told me at your place you'd come here."

"Get out," Fielding said.

"No," demurred Stover. "I'm in this case up to my neck. Mr. Fielding, do you love Reynardine Phogor? Did you ask her hand in marriage?"

"You're insolent." That was Congreve, not Fielding. "You're officious, too. And you're still under suspicion."

"I know that," said Stover. "That's why I want to help."

"Leave it to the police," snapped Fielding. "I ought to demand your arrest now, Stover. Get out, I say."

Stover turned to the door. "Tonight," he said over his shoulder, "I've stood face to face with the murderer of Mace Malbrook."

It was hard to say which started the most violently, Congreve or Fielding.

Stover laughed, and was gone.

CHAPTER XV

Captain Sharp

"PSSST! Mr. Stover!"

Dillon Stover, stepping out on the balcony of Malbrook's old quarters, stopped in the very act of summoning a flying taxi. He looked in the direction of the muttered signal.

At one end of the balcony was a service stairway. Upon that stairway, at a level so that only his head and shoulders were exposed, stood someone whose outline in the gloom was vaguely familiar.

"This way, Mr. Stover!"

He turned and approached, cautiously. Four days of desperate action, of chasing and being chased, had made Stover give much attention to every possibility of danger. If this was an assassin he was going to be sorry.

But the man who had hailed him turned and ran swiftly and furtively down the stairs. Stover followed, his body tense and ready for any sort of action—to fly, to strike out, to beat off an attack. No such need came. The two men gained a balcony below Malbrook's, and here Stover came close enough to recognize his companion.

"Captain Sharp!"

"I c-came here because—"

Stover waved away the words. "You're in danger, Sharp. Mortal danger. I warn you, not because I value your precious carcass, but because you may be able to give evidence for me. Your best chance is to do what I told you. Go and confess some minor crime and get locked up

in the police detention cells."

Sharp shook his head furiously. "I found that I can't do that. There's too much fire on me."

The man, for all his coarseness, had appeared strong to Stover at the earlier meetings. Now he seemed ready to crumble, to collapse. His considerable size made him the more unwieldy in the grip of whatever terror had him.

"You see," Sharp continued, "the whisper-voice got back on the phone again after you were gone and I was making ready to leave. That fellow, whoever he was, had heard plenty. He said that the police were being warned about some real dirty things I'd done —killings."

"And so you can't face the music?" finished Stover for him.

"Not when it plays that sort of tune."

"It's playing the Dead March now," Stover informed him grimly. "Well, so you came to me. How did you know I was here?"

"I didn't. I came here after I heard at Mr. Brome Fielding's place he'd headed this way. But when I found that a police officer was with him—"

"Why are you so anxious to see Brome Fielding?" Stover interrupted.

"Because he's the partner of Mace Malbrook. Because he wants to clear up the murder. Because he's got enough influence to hide me and guard me, if I can convince him it's worth his while."

There was the whirr of rockets above. Sharp stepped to the balcony and looked upward.

"The police flyer's leaving," he reported, "with only that cop in it. Fielding's still up above. Let's go talk to him."

STOVER put out a hand to stop Sharp, but the captain was already heading for the stairway. Stover followed him. Their heads rose into view of the upper balcony. Fielding stood there, elbows on the railing, looking moodily skyward. At that very moment, an air-taxi curved in and hovered.

"Is that you, Dillon?" asked a voice from inside. Buckalew!

"No," replied Fielding sourly, "it is not."

Buckalew was leaning out of the taxi, but turned to address the pilot: "You say you brought him here, and left him?"

"Yes, sir," answered the man who had flown Stover to the spot some time before. "He told me to go. Said he'd be here for the night."

"Let me assure you that he won't be here for the night," snapped Fielding. "I myself ordered him away."

"Very well," said Buckalew in the placating tone Stover had heard him use before this when conversing with Fielding. The taxi departed.

At once Sharp spoke, in the same tone and almost the same words with which he had attracted Stover's attention: *Pssst!* Mr. Fielding!"

Fielding spun away from his pose of meditation. One hand whipped an electro-automatic from somewhere. "Who's that?" he demanded breathily. "Show yourself!"

Sharp lifted his hands, and came up the stairs. "It's nobody you really know, Mr. Fielding," he fawned. "My name's Captain Sharp. I wanted to ask you something."

"But you know me," put in Stover, walking up behind Sharp. "As you say, you ordered me off the place. But I'm not taking orders from you just now. In fact, Fielding, here's one point on which we may even collaborate. I mean Sharp here."

Fielding did not put away his gun. "What's this about?" he grumbled.

"Sharp's a witness in this murder case," Stover informed him. "It began when—"

He paused. How much should he tell this professed enemy of his? Fielding spoke carelessly, solving the problem for him.

"Any evidence had better be given to the police. I'm not as officious about this murder as you are, Stover."

"Not to the police yet," interposed Sharp. "I've got a bad record. But maybe, if I showed up when the time was right, with evidence I could give—"

Fielding seemed to understand. "And I'm to give you a hiding place, eh?" he suggested. "Well, maybe it's

my duty. Come over to the other end of the balcony, my flyer's there. You can come, too, Stover."

They entered the car. It was a luxurious one, softly and richly cushioned, most of its hull glassed in. Fielding took the pilot's seat, a high-backed metal construction to which, as regulations in Pulambar ruled, a parachute was fastened. He buckled the safety belt across his middle and took the controls.

"Sit here next to me, Stover," he commanded. "Sharp, make yourself comfortable in the rear. I can trust you better than Stover. You're only a petty adventurer of some kind. He's a murder suspect."

This with a sneer. Stover swallowed it with difficulty and took the benchlike chair where a co-pilot generally sat. Like Fielding, he buckled on the safety belt. Fielding dropped into a cushioned chair behind him. The rest of the cabin was dim, with several other seats and lockers. The flyer took off.

"WHERE to, sir?" asked Sharp, as though he were flying the craft and asking for directions.

"My quarters, across town," was the reply. "There's a place for you both to stay."

"Both?" repeated Stover. "You aren't offering to put me up, Fielding?"

"I'm telling you that you're staying with me. The police haven't pinned anything to you, but just now, with this shabby Captain Sharp as a helper, you look a trifle riper for—"

"But you were going to guard me at your place, not turn me over to the law!" cried Captain Sharp.

So strident was his cry of protest that Stover turned to look at him. He saw Sharp rising half out of his seat, hand flung forward in appeal—saw, too, in the shadows of the cabin another human figure. The head and shoulders seemed to hunch and expand, the face looked blank and colorless.

Thinking of it afterward, Stover realized that he had been made furtive by the constant thrusting upon him of danger. At the time he thought and diagnosed not at all. He threw off the safety strap and hurled himself out of his seat on the co-pilot's bench, and flat on the floor so that the metal bench was between him and whatever was lurking in the cabin.

"Fielding!" he yelled as he hit the floor. "Sharp! Danger—someone in here with us."

Fielding, too, glanced back. His face writhed.

"You saw—that—" he was trying to form something. His hands fumbled strangely at the controls.

An explosion tore their vehicle to bits. Stover's hearing sense, even while it was shocked and deafened, sorted out the rending of fabric, the starting of joints, the crash of tough glass. He heard, too, the brief half-scream which was all that Sharp had time to utter before destruction overtook him.

His prone position, in a narrow nook between bench and control board, saved Stover. He was not thrown out, though the lower half of the flyer—all that remained intact—turned a complete flop in the high air over Pulambar. He saw the metal pilot's seat go bounding away, Fielding hanging limp in the safety strap. Would the attached parachute open in time to save Fielding?

Stover had no time to watch. For the wreckage, with him wedged among it, was falling into an abyss.

It struck a wire-woven festoon of walk-ways and communication cords between two towers. The wires, though parting, broke the downward plunge a little. Stover managed to writhe along toward the controls. He got his hands on the keyboard, manipulating it frantically. The thing worked. A crippled blast went *pup-pup-pup*, but there was no stopping the awful plunge.

Stover saw the lower building-tops charging up at him, saw too the silvery expanse of a great pool of water that, set among colored lights, did duty as a public square. If he could only land in that. The gravity of Mars was less than Earth's, the fall was consequently slower.

He clutched again at the controls.

The blast, not enough to check the fall, could change the position of the hurtling slab of wreckage. He leveled it out. As he had dared hope, the thing swooped slantwise in its fall. It was approaching the pool at a fearful clip, but not vertically. Before he knew whether to rejoice or despair the shock came, bruising and breath-taking of impact.

The heavy wreck sprang upward like a flat rock skimming along the surface, and Stover was thrown clear at last. High he flew, and down he came, head first. Somehow he got his hands into diving position. Then, with a mighty splash, the only lake of water on all Mars received his body safely.

CHAPTER XVI

Malbrook's Archives

STOVER struck the bottom of the lake with almost unimpeded force, but it was soft. Turning around upon it, he let himself float to the top. It was cool, damp, restful. His head broke water, and he lay low between the ripples, washing the bottom-mud out of his curls and taking stock of the situation.

The walks along the rim of this pool were lined with noisy sight-seers, all gazing to a distant point in the center of the water. Great turmoil showed there, and several light flying machines hovered and dipped above the spot where the wreckage had sunk. Stover struck out for the nearest walk.

"Help me out!" he called to those gathered there, and half a dozen hands reached down to hoist him up.

"What was that splash?" he demanded, to head off any questions and surmises. "It knocked me right off into the water."

"You ought to sue somebody," advised a bystander. "Some fool's flying car came down out of control, it looked like. I just had a glimpse. Come and have a drink to warm you up."

"Thanks, no. I'll get an air-taxi back to my own place," said Stover.

He sought an elevator that took him to a rooftop where several taxis loitered. One of them had a heater inside, and in it Stover deposited himself, directing the pilot to take him for a leisurely tour while his clothing dried somewhat. At length Stover gave the address of Malbrook's fateful apartment.

It would be empty now—or would it?

Buckalew had come to Malbrook's balcony, looking for Stover. He had known that Fielding was there, that Fielding had a moored aircraft. What then?

Stover's mind went back to the happenings of the morning. Buckalew had been absent from the parlor when Gerda was killed in the closet. Later had come evidence that the explosion was engineered from below by some strange elascoid device. And then the assault by the draped figure. Later, the mysterious being was gone, while Buckalew had hauled Stover up from his painful lodgement between those forked cables. Buckalew had been magnificent then. Resourceful, strong, heroic—but mysterious.

"But if he'd wanted to kill me," reflected Stover, "he couldn't have done it then. Too many curious flying folk hovering around. Later, at noon, Sharp seems to have been visited by the same draped whisperer I saw. Was Buckalew with me at that time? I can't remember."

He counted the dead in his mind. First Malbrook, then Gerda, then Sharp. And perhaps Fielding. He himself had almost been added to the list. And, for all his struggles, he was still far from the solution.

"Here's your place, sir," the pilot broke in on his thoughts swung in to Malbrook's deserted and darkened balcony.

"Have you an extra radium torch?" asked Stover. "If so, I'll buy it. Thanks, that's a good one."

He paid for the torch, the journey and the heater, adding a handsome tip. Then he dismounted to the balcony. Letting the taxi fly away, he entered the now deserted and lightless hall where once before he had stricken Brome Fielding down and had

knocked at a door that forthwith blew off in his very face.

HE TURNED on the radium torch he had bought. That same door was partially repaired now, rehinged and fastened to the jamb with a great metal seal. Stover studied that seal. It was fused to the place where the lock had been, and marked with an official stamp. Police had put it in place to keep out meddlers like himself.

But Stover had come prepared. In his tunic pocket was a small ray projector that had survived the fall and the soaking. Drawing it and turning it on, he rapidly melted away the seal. He flung open the door with a creak and entered the blasted apartment.

Plainly it had not been touched since last he had stood inside it, disguised as a robot, with the Martian mechanic Girra. By the light of his radium torch, he began to make a new inspection. The elascoid stain was still on the floor near the half-detached ventilator device.

Stover looked at it once again, then turned his attention to the metal-plated walls. He tapped them once, then again, at regular intervals. They gave a muffled clank, indicative of their massive construction. So he progressed along for a space. Then, on the rear wall, the clank sounded higher, more vibrant—almost a jingle.

"The plating's thin," decided Stover, and brought his torch close to see.

He found no visible juncture, and resumed his tappings. By then he defined a rectangular hollow within the wall, about ten inches by fourteen. A hiding hole, cleverly disguised.

Again Stover plied his light, and this time he made a discovery. The wall at that point had been lightly coated with metallic veneer, the exact tint and shade of the wall. Under it the joinings of the wall cupboard would be hidden. Why, and by whom?

Not Malbrook, Stover decided at once. That cupboard had been devised for his use, probably his constant use. Then someone who had been here since the explosion wanted to seal and hide the place until later, when the guilt was fixed.

"Yes, fixed on an innocent man," decided Stover wrathfully. "Then, with the police away, the hole could be opened and whatever's inside taken out."

He cut the beam of his ray until it would gush out as narrow as a needle and as hot as a comet's nose. Carefully he sliced through the tempered metal of the wall-plate, along the edges of the hollow rectangle. The piece of thin metal fell out. He caught it before it clattered on the floor, and set it carefully down. His torch turned radiance into the recess he had exposed.

Not much within, only a sheaf of papers and a round thing like a roll of gleaming tape. He studied it first. It looked like the sound track of a film, or a televiso transcription. Reynardine Phogor had said that Malbrook's will was in such a form. Was this the will, or something to do with it?

He saw that one edge of the strip was mutilated, as if roughly cut away. And it had been hidden here, in what was the safest hiding place in all Pulambar until someone like himself came with a clue and an inspiration.

Pocketing the little roll, Stover turned his attention to the papers. At the top of the first was a title in big capitals:

CONFIDENTIAL REPORT
KISER DETECTIVE AGENCY
ST. LOUIS, MO.

"Here, I know about that Kiser crowd," Stover told himself at once. "Political outfit—shady work—do anything for enough money. A high-class phony like Malbrook would use just such a detective outfit. But what's a Pulambar biggy doing with shyster sleuths clear across space in St. Louis?"

Just below, in the written report, was the answer to that:

Replying to your inquiries: Dr. Stover's death laid to natural causes. He was old, overworked. One or two thought he went suddenly. Nobody takes such theory seriously.

No information to be had on his condensation experiments. Work said to be almost complete.

His grandson, Dillon Stover, has been trained to same career and is to continue where Dr. Stover left off. Young Stover on survey trip to Mars. Will visit Pulambar.

THERE, Stover realized, was the motive for the murder that never was committed—his own. Malbrook had grown rich from the monopoly of water rights on this desert world. The condenser ray would make rain possible, spoiling the monopoly and biting into Malbrook's fortune, the fortune Reynardine Phogor now thought to acquire. Malbrook, therefore, had determined to get Stover out of the way, keep him from completing the work.

Stover put the papers into an inside pocket, and turned off his torch. All in the dark he drew himself to his full height.

"But it was a double stalk, and a double plot," he told himself once again. "While Malbrook was after me, somebody was after him. I was nominated for the position of convicted murderer. Now it's gone beyond that, and I'm to be killed to keep my mouth shut. In other words, I must be close to the solution."

Noise in the reception hall just outside. Then a light, a torch like Stover's. It sent a searching ray into the room, centering here and there, finally hovering at the recess Stover had opened. The light shook, as if the hand that held it was agitated. Then it quested again, and its circle fell upon Stover.

His eyes filled with glare, blinding him. He heard a smothered gasp, and sprang in that direction. An electro-automatic spoke, the pellet whining over his head. Then he was upon the newcomer. The pistol flew one way, the radium torch another. The battle boiled up in the dark.

Hard fists clouted Stover on the temple and the angle of the jaw, and his own hands were momentarily tangled in the folds of a flying cloak; but he leaned into the storm of blows as into a hurricane, and got his arms clamped around a writhing waist. Bringing forward a leg, he crooked it behind his adversary's knee and threw himself forward. His weight was not much on Mars, but it was enough. Down they went, Stover on top.

"You were going to rub me out, eh?" he taunted the writhing, flurrying shape he had pinned down.

Only pantings and rustling answered him. His adversary was saving every bit of breath for the struggle. Again a fist struck Stover on the nose, jolting tears into his eyes, but he worked his hands to a throat and fiercely tightened his grip. Fingers tore at his wrists, but they were not strong or cunning enough to dislodge that strangle hold. Stover felt fierce exultation flood him.

"You tried to kill me," he gritted. "Now I'll kill you."

At that moment, more light burst from the front of the hall.

"Reynardine," boomed Phogor. "You slipped out alone, but I guessed you'd come here after the will. I followed."

As his radium flare flooded the place with glow, Stover sprang up and back. He gazed anxiously at his late adversary.

It was Reynardine Phogor, rumbled and half-fainting, her hands at her throat.

CHAPTER XVII

The Roundup

"WHAT does this mean?" Phogor demanded, in the voice of a thunder spirit. He carried a pistol with which he threatened Stover.

Reynardine sat up. Gasping and choking, she managed to speak. "This man was hiding here, knowing that I would come, so that he could attack me."

"Knowing you would come?" echoed Stover sharply. "How would I know that? It was you who attacked me—firing with your pistol."

"You said that the will would be hidden here," she charged. "My stepfather knew that I would head for this place. Undoubtedly you knew the same. And it was you who attacked. I fired in self-defense."

That last was quite true. Stover felt

abashed and angry with himself. Yet he did not bring himself to apologize.

"I did not know it was you. I thought it was a man," he explained.

"Daughter, did he hurt you?" Phogor asked. "Because if he did—"

"Careful," broke in Reynardine, who was suddenly the calmest of the three. "His body would be a bad piece of evidence against you. Otherwise, it would give me great pleasure to see you shoot him."

Stover was examining his sprained hand which ached after the scuffle. He hoped devoutly that he had done his last fighting for the night, at least.

"Let me explain one simple item of the business," he attempted. "I know little or nothing about the will. When you mentioned it at your own place, I asked if it might be here. I didn't say it was here. Indeed, I had no way of telling. Perhaps we've both jumped at conclusions, Miss Reynardine."

"You are clever at explanations, Stover," Phogor bellowed at him. His great frog-mouth was hard-set and cruel, and he glared yellowly out of his blob eyes. "I intend to escort you to the headquarters of Congreve. He will thank me for this evidence against you."

"But," returned Stover hastily, "he won't fail to ask what you were doing here."

Reynardine looked at her stepfather. "This man is a savage and perhaps a criminal, but he speaks the truth," she said. "It had better not be known that you and I came here tonight."

Phogor shrugged his shoulders in acceptance of that. To Stover he said: "This means that I won't injure or detain you unless you do something to force action. But you have struck and injured my daughter. That won't pass without some retaliation on my part later. Now I give you leave to go."

"I don't need leave from you to go," retorted Stover, and strode away toward the balcony.

Feet hurried after him. It was Reynardine.

"Mr. Stover," she breathed, "I've been catching back my wind and collecting my wits all these past few moments. And, though it was I who got the slamming and choking, I feel less upset about it than my stepfather. For one thing," and she was able to smile quite graciously, "I shouldn't have suggested that you were a criminal, I don't really think you're guilty."

"I know I'm not guilty," he returned, "but with everything so complicated and mysterious, how can anyone else be sure about me—except the actual murderer of your fiancé?"

PHOGOR approached, furious again. "You dare to insinuate that my daughter is guilty?"

"Mr. Stover is insinuating nothing," Reynardine calmed the Venusian. "He came here to search for evidence, just as we did. And he is more unselfish. We want the will; he only wants a clue to the murder."

"I'm being selfish, too," Stover assured her, for something bade him be loath at accepting favors from her. "I jammed myself into a situation where I must solve this case or be the next victim, or maybe the victim after the next. Well, Miss Reynardine, you're being very kind. But what does this all mean? Why this sudden new attitude on your part?"

"I don't know," she said. "I think I trust you because you're the best-built tall man I ever saw, and with the bluest eyes. Yes," she continued, touching her throat, "and with the strongest hands. I'm able to testify that you fight both hard and fair."

Phogor snorted like a horse in a rainstorm. "This, daughter, is ridiculous. You know nothing about this man Stover."

"Only the things I have just said," she replied to her father, but with her brilliant eyes still on Stover. "I intend to learn more about him."

Stover's reaction to this almost aggressive demonstration of approval was one of baffled suspicion. He doubted if he was of such character and attraction as to sweep this proud and artificial beauty so completely off her feet. Looking at her, he knew that she could be a dangerous person if she cared to use her charm. Like a saving vision came the thought of Bee MacGowan, still in prison that he might have a chance to clear himself

and her, too.

"You leave me embarrassed, Miss Reynardine," he said. "So much so that I'll have to say good-night and depart."

"Wait," she said. "Why don't we come with you to your place and talk this thing out?"

"Talk it out?" he repeated. "Well, come on. I'll signal for a taxi."

Buckalew was waiting in the parlor as Stover let his self-invited guests in. One of Buckalew's hands held a fluttering gray cloth, the mantle that had cloaked the figure Stover had met on the girders. With an exclamation, Stover snatched it and looked at it.

"Where did this come from?" he demanded.

"I found it hidden in a corner of the balcony," replied Buckalew. "Probably the one who wore it dropped it there and hopped aboard one of the fleet planes that came around to investigate. I also found the wiring that was used to magnetize the walls. But who are these people?"

"You know them. Miss Reynardine Phogor and her stepfather. They seem to feel that a round-robin discussion will clarify some points of the Malbrook case."

"Perhaps they're right," said Buckalew. "Will you all sit down?"

REYNARDINE drew herself up in queenly fashion. "I won't sit down," she said. "Mr. Stover, I persuaded you to bring me here because I think you got something tonight that I mean to have—the transcription that embodies the will of Mace Malbrook."

He looked into her searching eyes. "What makes you think that?"

"Because, just before our little struggle, my torch showed me a wall-cupboard that had been rayed open. Nothing in it. Well," she held out her hand, "give it to me. Father, if we have to be violent here it will be easier explained than at poor Mace's old lodgings."

"That is quite right, daughter," agreed Phogor as he drew his pistol. "I think you were clever to switch the scene of action here. Now, if you please, Mr. Stover."

"Hold on!" cried Stover hotly, his temper rising. "I'm handing nothing over to you."

"That," said Reyardine Phogor, "is an admission that you have something." She turned to her stepfather. "If he won't hand it over, take it from him."

Buckalew turned swiftly to a side-table and snatched open a drawer. But before he could dart his hand into that drawer, Phogor fired a pellet that knocked the side-table flying across the room. Out of the drawer fell a small handsome electro-automatic.

"No weapons, Mr. Buckalew," cautioned the Venusian deeply. "You had better stay out of this altogether." To Stover he said: "I give you one more chance, Mr. Stover, to give me whatever you found at Malbrook's."

"Stover will do nothing of the kind," spoke the stern voice of Congreve.

The police head had come in, all uninvited and unnoticed, and had heard most of what had led up to the tense situation. He, too, held a drawn pistol. He extended his free hand.

"I take it you've finally got evidence," he told Stover. "Well, hand it over. This isn't an amateur with a society gun, young fellow. It's a police officer. Quick!"

Stover sighed in resignation and drew forth the papers he had found. Congreve accepted them with a nod, moved back and looked through them quickly.

"Better than I thought," he commented. "Here's the definite proof."

Stover took a step toward him. Congreve tried to put away the slip of paper, but Stover spied some words on it.

Mr. Malbrook:
I did what you said to do about Dr. Stover. Now I want pay, or you'll be just as dead. . . .

"Who wrote that?" demanded Stover, walking right up to the muzzle of Congreve's weapon.

"As if you didn't know," Congreve grinned harshly. "It's signed. And the man who signed it is dead tonight."

"I didn't have time to look at everything in that sheaf of notes," Stover assured him. "If it was written by—"

"You know whom it was written by. They just fished him out of the water." The grin vanished. "What was left of him and Brome Fielding's flying car."

SHARP! It had been Captain Sharp, then, who had brought his grandfather to death—and at the orders of Mace Malbrook. Congreve saw knowledge dawn in Stover's face, and chuckled. The police head plainly enjoyed a dramatic situation.

"You want to make a statement and save everybody trouble?" he said. "Let me help you. Sharp was hired to kill your grandfather. You met him at the Zaarr. You quarreled. Later—"

"You're crazy!" exploded Stover. "I'd have gladly killed both Malbrook and Sharp if I'd known they were guilty of murdering my grandfather. He was an asset to the universe, while they were liabilities. But I didn't know, and someone else killed them."

Reynardine Phogor spoke up hurriedly.

"I can vouch for Mr. Stover. He has been with me almost all evening since leaving the Zaarr."

Phogor and Buckalew stared at the girl. Stover laughed.

"Well tried, Miss Reyardine," he jibed. "You want Congreve to leave me here with you, so that you can find out what else I know about this case, at pistol-point, eh?" He addressed the officer again. "If you please, Congreve."

He was about to offer Congreve all the bits of evidence he had collected—surmises, secrets, brief glimpses, the bit of elascoid fabric, everything. But Congreve was so intent on something he had to say that he took no notice.

"Since Stover won't make an admission, it remains to convict him. He is right in making a last-ditch stand of this. Someone may bob up yet as the guilty one. But I want all concerned to come along with me."

"Come where?" asked Buckalew.

"To Brome Fielding's quarters."

"Brome Fielding's!" cried Stover, his voice shaking in spite of himself. "Is he—"

He had almost asked if Brome Fielding had survived that plunge out of the wrecked car. He broke off in time, and Congreve unwittingly answered the question for him.

"Fielding has found the will of Mace Malbrook in a safe at the office they both shared. Since everybody here is mixed up in the murder somehow, I want you to sit in on the hearing of it. We'll pick up Amyas Crofts and go right now."

CHAPTER XVIII

The Testament of Mace Malbrook

THE room was dim as they entered it, dim and quiet, with chairs for all and a blank televiso screen against the rearmost wall. Two figures sat in a corner behind some radio apparatus with a projector attached. One of these stood up and spoke. It was Brome Fielding.

"Phogor and Reynardine," said Fielding, "take these two chairs in the center. Buckalew, sit just behind Miss Reynardine. Congreve, you're here to investigate and protect. Maybe you'd like to sit next to the door, where you can keep an eye on everybody? Mr. Crofts, you may take the chair on the other side of the door. Mr. Stover," and Fielding's voice became an unpleasant growl, "I suppose you're to be congratulated from escaping from that wreck."

"You didn't expect me to live through it?"

"As a matter of fact, I rather did, It was myself that surprised me by surviving. Thank all the gods of all the planets for that automatic parachute."

"You two are talking in riddles," said Congreve coldly. "Better tell me the answers."

"I'll explain fully when we've had the will," promised Fielding. "Probably you'll be glad to hear the whole truth about that accident which you tell me finished poor Sharp. Sit next to me, Stover."

"Why next to you?" asked Stover.

"Because I don't trust you. I want to keep watch over you."

"Isn't Congreve here to do the watching?" mocked Stover.

Amyas Crofts said: "Put Stover next to me, and turn off the lights. Once he threatened me."

Stover looked at Fielding, then at the silent, hulking figure that sat half-hidden behind the radio machinery.

"My bodyguard," volunteered Fielding, as he saw the direction of Stover's glance. "I hired him at once when I heard that you were still alive."

"Not very complimentary to the police," rejoined Stover. "Well, if he's an honest bruiser, let him sit between us. I don't think I trust you, either."

Fielding was silent for a moment. Then: "Not a bad idea. Lubbock, will you trade chairs with me and keep watch over Mr. Stover? If he acts strangely at all, you will know what to do."

The bodyguard made no reply, nor did he move until Fielding put a hand on his shoulder. Then his great hulk shifted smoothly to the chair nearest Stover. Fielding switched off the last dim light, and they heard him fumbling with the controls of his machinery.

"This is a televiso representation, with transcribed sound track," he announced in the gloom. "It depicts the verbal making of the last will and testament of my partner, the late Mace Malbrook."

A click, and the screen lighted up.

They all saw the image of Mace Malbrook, in full color. He sat beside a table on which was placed a microphone to pick up his voice. In one hand he held a glass that seemed to be full of *guil.* A powerful drink, thought Stover, to be sipped while he recorded an important legal document.

Malbrook's pictured face looked pale and sardonic, and his mouth was set in the tightest of smiles.

"My name," came his formal voice, "is Mace Malbrook. The date, Earth time, is May eighteenth, twenty-nine hundred and thirty-six."

"May eighteenth!" breathed Stover. It was the day on which he had come to Mars, the day before the night in which Mace Malbrook had died. Malbrook's voice went on:

"The extent of my property holdings and controls can be ascertained by consulting the public records of the community of Pulambar. I make this statement at this time, recognizing that I may possibly come to my death at the hands of one Dillon Stover."

Stover heard a sigh from someone, perhaps Reynardine Phogor. He divined, rather than saw or heard, a leaning forward of Congreve. In the mind of the police head, Stover's guilt was again confirmed, though probably Malbrook had said what he had said simply in looking forward to a duel. Again the voice of the dead man:

"In the event of my death, I request that this recording be properly observed by my two heirs-at-law, Brome Fielding and Reynardine Phogor; and they be accompanied by reputable and responsible witnesses."

That was the usual introduction to a will so recorded. The image of Malbrook sipped from the glass, and the voice added:

"I hearby make definite statement that, although each of these two heirs expects to receive at my death the overwhelming bulk of my holdings and interests, I am obliged to neglect one of them in order to treat the other as I consider deserved. I now make my formal bequests and decrees. First: That all my debts be paid, and a funeral service be conducted for me in a manner befitting one of my standing and reputation. Second—"

A break in the speech. The figure of Malbrook rose from its seat, as if to lend emphasis to what would follow.

"Second," came words in a louder and sterner voice, "I direct that my former partner, Brome Fielding, be arrested, and charged with my wilful murder for his own selfish profit!"

Loud, raucous confusion. With a loud buzz and snap, the radio mechanism shut off and the screen darkened. But the voice of Dillon Stover rang on the air that still vibrated with the accusation.

"Let nobody move!"

Stover was on his feet, near the door where sat Congreve and Amyas Crofts. He flashed on his radium torch, which he had never put aside since his adventure at Malbrook's, and it filled the room with brightness.

It showed all the others risen, all but the mantled bodyguard Fielding had called Lubbock. Fielding himself had moved back from the radio controls, toward a blank-seeming wall.

"Don't try to duck through any hidden panel, Fielding," warned Stover, and his free hand whipped out his ray thrower. "Someone turn on the room lights . . . Thanks, Congreve. Now, while Fielding is still pulling himself together, let me say that I pulled a trick to get this case out in the open, and it's succeeded. I added my voice to that of Malbrook. Fielding murdered his partner and the others, for the reason you have just heard. He wanted all of Malbrook's holdings for himself. And he tried to lay the blame on me."

"Mr. Stover—" began Congreve angrily.

"Don't interfere now," spoke up Buckalew suddenly and clearly. "I respect the law, but not all the decisions of all its representatives. Stover must be allowed to finish."

HE MADE a grab at the front of Phogor's tunic, and possessed himself of the Venusian's electro-automatic. Congreve subsided.

Fielding had jumped forward again, standing close to Stover. He seemed to dare an assault from the ray-thrower.

"You're convicting yourself, Stover," he charged. "I wanted this will—which has been tampered with—to be heard, and properly witnessed, before the final bands tightened around you. But now—Congreve! This man is armed and desperate, but I know he'll never defeat the law. Before you all, I want to tell what happened earlier tonight."

He pointed a finger at Stover. "He and Captain Sharp accosted me. I took them into my flying machine, intending to turn them over to the police. When we were in the air, and I announced my intention, Stover set off some kind of a bomb. I only escaped because I was strapped in the pilot's seat and had an automatic parachute."

"Certainly you had, since it was you who did the bombing;" Stover shouted him down. "That pilot's seat was the best possible protection, Fielding. It had a high metal back to fend off a blast. The blast itself kicked you loose, seat and all, and the parachute let you down. I escaped by chance and desperation and the luck that wouldn't let a swine like you get away with this dirty string of murders! And there was another figure in the car with us."

"You mean Sharp?" put in Congreve who has been trying to edge in a word for some time.

"No, not Sharp. Someone—something else."

"Preposterous!" snorted Fielding.

Stover turned back to him. "Get back a little, Fielding. I want to look at this bodyguard of yours, the fellow you said you'd hired to protect you from me? Why is he so silent? Why doesn't he get out of the chair?"

When Fielding refused to move, Stover pushed him violently aside. "Look!" he cried to the others.

They looked.

"That's no bodyguard," said Congreve at once. "It isn't a man at all."

"It's nothing alive," put in Amyas Crofts, stepping forward.

"No," said Stover. "Certainly not. Just what is the thing?"

CHAPTER XIX

The Murder Weapon

THEY were all staring now.

The draped hulk was not a man. It was a dummy. Its head, rising above the folds of the mantle, was flesh-colored and lifelike, but the full light that now flooded the room showed it up for a painted sham. Its eyes and lips were flat stencil-like blotches, its skin looked taut and puffy.

"It seems to be some sort of hollow shell," commented Stover. "You moved it very easily from chair to chair, Fielding. I wonder if it isn't an inflated shape of thin elascoid—like a toy bolloon at a carnival?" He lifted his ray thrower, as though to send a beam at the thing.

"Don't!" Fielding almost screamed.

"Why not?" demanded Stover, and his weapon drew a bead on the lumpy, inflated head. "Why so compassionate over a big air-blown doll? I think I'll just deflate your friend the bodyguard."

His finger seemed to tremble on the trigger-switch of his weapon. Fielding gave another cry, wordless and desperate, and flung himself forward. He caught Stover's wrist, deflecting the aim of the ray thrower.

"You can't do that!" he chattered. "You don't know—you can't know!"

Stover threw him clear, with an effortless jerk of his arm.

"I didn't know," he agreed, "but I'm beginning to find out. Up to now it's been guesswork. Fielding, you've given your show away. If I shot that image—as Malbrook shot the one that was painted to look like me, as poor Gerda slapped the unknown shape that jostled her in the dark closet—or if it received the slightest jar, as the trigger-devices gave to the image of Buckalew at my apartment, and to the dummy in your flying car—it would explode. The detonation would blow us all to bits, including you who figured to explode it if worst came to worst here—but who also figured to escape yourself."

Fielding had recovered himself. He stood between Stover and the dummy.

"I protest at this farce!" he cried to Congreve. "Arrest Stover. If you can't do it alone, deputize these others to overpower and disarm him. I accuse him of tampering with the recorded will of Mace Malbrook and of trying to saddle me with the blame for these dreadful crimes. Probably you'll find, from this additional evidence, that he's definitely the murderer."

"Let me get a word in edgewise," spoke up Reynardine Phogor. "All these recriminations are whizzing by mighty fast, but Fielding is right about one thing. Those last words that came from the television screen weren't in the voice of Mace Malbrook. They were in the voice of Dillon Stover."

"You're right," Stover admitted. He put away his radium torch and produced another thing from his pocket, a small microphone. "I was near enough to the radio to reach out and switch off the sound track at what I thought was a good moment. And with this mike I substituted my own voice. But I spoiled no will. Fielding had done that already. Look at this."

Reaching into his pocket again, he dug out the ragged coil of film he had found in Malbrook's cupboard.

"Damaged, but partially salvageable. It's Malbrook's true spoken will, undoubtedly cut away from this transcription. Take it, Congreve." And he passed it over.

PHOGOR was looking into the opened radio mechanism. "Stover has spoken truth. This film has been cut and spliced, a new track worked in."

"Probably Fielding's substituted piece of film is beautifully faked to sound like Malbrook's voice."

"That will," said Fielding, "leaves everything to me."

"It would. That's why you faked it," charged Stover. "Sound laboratories can diagnose and show the truth of all this."

Congreve put away the coil of film. "Everybody's been taking my job out of my hands lately," he growled. "Now I ask, with all the courtesy in the world, to be allowed back into the police business. I pronounce you all under arrest until this is cleared up."

"Let me finish," cried Stover.

"I demand a proper court hearing," Fielding began.

"You'll be heard—and condemned—right here!" Stover said tersely. "This explosive dummy you've brought in among us is the evidence that answers the riddle. A fabric of thin, strong elascoid, made into an airtight form that can be inflated into a very lifelike man. Without air in it, the tube is so slim that it can be inserted into a locked room through as narrow a hole as a ventilator pipe. But the inside's coated with a nitroglycerin oil, enough to wreck a small area. When inflated from the other side of the hole by a

small pump or a tank of compressed air, it becomes a shape that scares the victim, makes him strike or shoot—and brings about his own death."

"You're crazy as well as criminal," raged Fielding. "You can't prove that fantastic theory."

"But I can," said Stover. "You seemed to be in the clear at Malbrook's because I knocked you down before the explosion. But you'd just finished inflating the elascoid balloon that looked like me. Inside the room, Malbrook saw it and fired. It finished him and poor Prraal."

From his pocket he drew out a shred of elascoid, the bit he had salvaged from the ventilator of the closet where Gerda had died. "Take charge of this, Congreve. It's Exhibit A, a piece of such a figure. I'll explain more fully in a moment."

Again he turned on Fielding. "Most of the fabric of those dummies can be traced as stains—little smears left by the violence of the explosion. And we can examine this one which is still intact. Fielding, you long envied Malbrook his half of the great enterprises you ran together. You long planned this sort of murder—had elascoid dummies ready to finish him and any others you might need to kill.

"When Malbrook decided to fight a duel with me, you struck, figuring I would be found guilty. But you struck too late. For one thing, you found out what Malbrook's will provided. That was why you wanted to marry Reynardine Phogor. When she refused you, you faked the will. Congreve brought us all in to hear it. And you prepared a specimen of your elascoid-and-nitroglycerin handiwork to kill us all if anything went wrong. Instead of which, it's going to convict you!

"You have proved your point," snarled Fielding without further subterfuge.

FIELDING was backing toward the far wall, and in front of him he held the elascoid dummy, divested of its robe. Buckalew, Stover and Congreve pointed their weapons, and Fielding only laughed.

"You daren't shoot at my elascoid friend," he warned. "That would dispose of all of us. But I'll take the risk, if you force me."

"By your actions you are confessing, Fielding," said Congreve sharply.

"Yes, and I'm escaping," snarled Fielding. "A few more deaths won't make my punishment any tougher."

"Not after the people you've already killed," agreed Stover. "Better grab him, Congreve, before he cracks."

"How far do you expect to get, Fielding?" demanded Congreve.

"You'll never know. I know Pulambar—hidings, strongholds, disguises. Stand still, all of you. There's a hidden panel, as Stover surmised. If you move before I get through I'll explode my elascoid friend."

Putting a hand behind him, he pressed a stud on the wall. A dark section slid away, revealing a rectangle of darkness.

"Good-by," he taunted them. "Here, now you may have the evidence Mr. Stover so cunningly puzzled out."

And he hurled the inflated figure across the room.

Strover realized later that what followed had been packed into a very brief interval. It was only that his mind was working at rocket-ship speed, outrunning his muscles and reactions, that made everything seem to transpire in slow-mation.

He sprang to catch the elascoid dummy. It was in his thoughts that if someone should die to save the others it might as well be himself who took the explosion against his big body. But somebody else moved more swiftly.

Buckalew!

From the side of the room, Buckalew leaped at an angle. He caught the thing in his arms, and rushed it into the secret passageway by which Fielding was trying to escape. At that instant, the blast came.

Reynardine Phogor screamed, her stepfather caught and steadied her. Stover and Congreve recovered from the blast of air and pushed their way through the gaping, smoke-filled panel.

The passageway was bulged as to walls and ceiling, but had not sprung apart anywhere. Stover stumbled

over the prostrate form of Buckalew, and recovered in time to keep from stepping upon the manifestly dead body of Fielding. Of the dummy remained only another of the elascoid stains.

Stover felt heart-sick as he drew back from Fielding's corpse. Then he heard Buckalew speak.

"I'm all right, Dillon."

As he spoke, Buckalew struggled into a sitting posture. His clothes were in rags, but he smiled cheerfully.

"All right?" repeated Congreve, fumbling around in the passageway. "All right when that nitroglycerin blew a leg off of you?"

HE POINTED to where it lay, foot, knee and part of the thigh, in a corner. Stover stared miserably. But Buckalew laughed. He drew up the knee he had left, and clasped his arms around it.

"It's not as bad as it looks," he told Congreve gently. "Pick it up and see."

The police investigator did so, gingerly. He uttered a startled exclamation as he dropped the leg in surprise. The limb fell with a metallic clank.

"Artificial!" he snorted, as though this were a prank played deliberately on him. "What next in this space-dizzy case? An artificial leg on a man."

"In a manner of speaking," agreed the victim of the accident. "Stover can help me, Congreve. My leg can be repaired. Don't you think you had better call the coroner for Fielding—and then see about releasing Bee MacGowan right away so she can get in touch with my young friend here?"

Congreve glanced from one to the other and then took a swift look at the body of Brome Fielding. "Yeah," he said a bit sourly. And he stalked out, herding the incoming group back out ahead of him.

Dillon Stover knelt anxiously beside his injured friend. For a few moments the two were alone with only the dead Fielding for company.

"Robert," said Stover, marveling, "you shouldn't have taken such a chance with a—a game leg. I was going to try to capture that dummy and prevent an explosion. And your —your agility amazes me. I've lived intimately with you, and I never dreamed you had an artificial leg."

"Listen, Dillon," said Buckalew in the saddest accents Stover had ever heard him use, "I talked Congreve into going out so I could tell you something that only your grandfather and Malbrook and Fielding knew. I've tried to keep it from you, but you are the one person really entitled to know —and, besides, I need your help now."

"Of course, and you shall have it!" cried Stover vehemently. "I owe you a lot—including my life. Are you sure you aren't injured elsewhere, Robert! Perhaps internally?"

"Only on the surface, Dillon," said Buckalew, smiling faintly. "You don't yet understand. How can a—a thing with an artificial body be injured?"

"But you—*what?*" exclaimed Stover, his blue eyes widening in a startled way as he gazed at the face of the speaker. "What did you say?"

"I have more than one artificial leg, Dillon. I'm a fake through and through—legs, arms, body and head, I am made of metal covered with synthetic rubber flesh. I am the last robot your grandfather made. That's why he gave me the name of Robert."

CHAPTER XX

Table for Three

AGAIN they sat at the Zaarr—Stover, Bee, and Buckalew. It was the same table from which Stover had once risen hotly to smash Malbrook's sneering face.

"Somehow," Stover was saying, "I'm not as shocked as I should be, Buckalew. I think I knew that you were a robot all along."

He gestured at the food and drink served for only two. "This, subconsciously, was my first clue. Your's isn't a normal body, or you'd have to nourish it at times. And then your eternal youth; you knew my grandfather intimately, and you're not a day older now than then. Again, when that explosion happened at our

lodgings, you threw yourself in its way and saved me."

"You gave credit for that rescue to the poor robot servitor," reminded Buckalew.

"At first I did. But when you sighed over 'A robot saved you,' you almost gave it away again. Your body, more solidly and strongly made than the metal servitor, kept my beef and bones from being de-atomized. And you didn't pass out on me, but calmly changed clothes."

"Not vanity on my part," Buckalew assured him. "Without clothes I'm pretty evidently an artificial figure. And so I had to think of dressing before I dared awaken you. I dare say I acted very strangely, Dillon, but I was really telling the truth."

"The truth?"

"Fielding magnetized the walls to hold both me and the servitor helpless until you came. Also to hold the inflated copy figure of me up, too, so that when it was released and sagged down the trigger device would set off the explosion. I actually went blank in my mind—it has metal connections, you see. They were frozen inactive until the magnetizing power was turned off. If I was rude or vague, I'm sorry."

"There were more clues," Stover continued. "You didn't fear a shot from Gerda's pistol. You had no sense of dizziness when you climbed down those girders after me; and your body, smaller than mine, was yet heavy enough to pull mine up by the counter-balance of its weight. And —well, won't you tell us the whole story now?"

"Very briefly." Buckalew toyed with the wine glass from which he never drank. "I was made, Dillon, by your grandfather when he was a young man like yourself, studying here. Malbrook's grandfather had engaged him to experiment in robot engineering, and I was the finest example of his work. At first your grandfather was dissatisfied with the sub-mental, sub-personal servitors he evolved—but when he made me, he was heartsick."

"Why?" asked Bee with breathless interest.

Buckalew smiled faintly. "I was a mind, a personality. To him, I was a friend, and a dear friend. But because I was an artificial construction I was property, the property of the man who engaged him." Buckalew was somber. "He stopped making super robots at once, but I was already here. I descended at last to the Malbrook whose death has caused all

NEXT ISSUE'S HALL OF FAME STORY

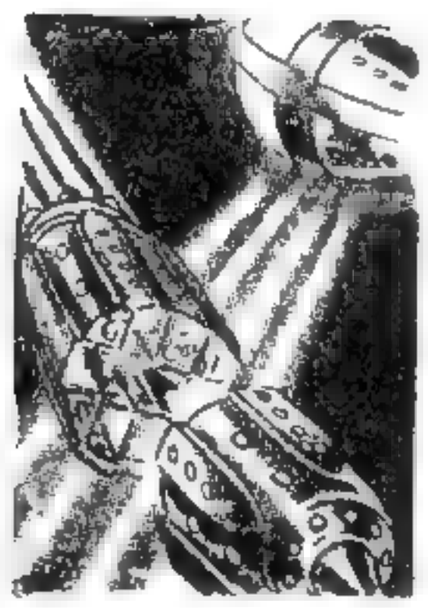
•

HORNETS OF SPACE

An Interplanetary Police Story

of Heroic Sacrifice

By R. F. STARZL



•

A CLASSIC OF SCIENTIFICTION!

these curious disclosures."

"So that was his hold over you," summed up Bee.

Buckalew smiled bitterly.

"Yes. He could expose me at any time as an artificial form of life. He could, if he wished, have dismantled and destroyed me. He let me live as if I were a free man, well-supplied with money—but only to run various unpleasant errands for him." Buckalew grew somber, but only for a moment. "I'm free of him now. Nobody knows my real status except the two of you and the heir to Malbrook's property."

"Reynardine Phogor," finished Stover. "Yes, she knows about you."

"What a rotten shame!" put in Bee MacGowan warmly. "She may prove a worse owner than Malbrook."

"I can only find out," sighed Buckalew.

Stover smiled as he signaled a robot waiter, who replenished his glass and Bee's. Then he said: "What were some of your jobs, Robert?"

"The principal one was being Malbrook's financial figurehead. In my name he could speculate. His own operations would have caused too much publicity and set financial opponents on guard against him. With me as a front, he could operate safely. Even if I wanted to cheat or oppose him, I couldn't. He could declare my true status at any time, destroy me, and take my technical holdings. Fielding used me that way, too."

"Could you operate as a financier and business man yourself?" inquired Stover.

Buckalew's artificial eyebrows went up. "Yes. I'm well experienced and adapted. But I'll never get the chance, belonging to Miss Phogor."

"She and I had a conversation while we waited to be interviewed in Congreve's office," said Stover. "First of all, she thought that she owed me everything. Without me, the true bequest to her of the bulk of Malbrook's property would never have been learned. And I agreed very frankly. I asked certain favors."

"About the water rights?"

"Yes, about the water rights," agreed Stover. "They are going to be administered for the good of the whole Martian population—a government project and relief activity, not a money-grubbing monopoly. They'll tide Mars over while the condenser-ray work is being perfected. She agreed that I was right—such things should be. And then I made another stipulation. I asked her for something outright as a reward for my services."

"Reward?" asked Buckalew. "What?"

"You," said Stover succinctly.

For once Buckalew's artificial face betrayed something like mute, human astonishment.

"She made a formal written transfer of her title to you over to me," said Stover. "Technically, you're now my property. That will protect you from any legal trouble as a piece of machinery. But, practically, you belong to yourself."

"To myself," muttered Buckalew. "To myself." He picked up the wine-glass. "For the first time since I was made, I wish I could take a drink."

"Come to Earth with me," Stover was urging. "There you'll never be spotted as anything but a man. And you know that Bee and I will never tell on you."

ROBERT BUCKALEW looked at him with startled eyes.

"You think I could run my life my own way?"

"Why not? I'll gamble on you. In all of Pulambar, in all of the Solar System, in all of the habitable universe, I could never ask for an animate friend with a braver, warmer, truer heart than you. And here's to your robot health."

Stover and Bee lifted glasses and drank. Buckalew gravely bowed his sleek head.

"Consider a return toast drunk," he said in a voice that for once trembled with the emotion that robots are said never to feel. "We're all safe, all happy, all triumphant. We don't have to fight or hate anyone. Not even Brome Fielding."

"No," agreed Stover. "We can see now that Fielding was beaten from the start."

Both Bee and Buckalew turned sharp gazes upon him.

"How so?" asked Bee. "With Malbrook dead, he was so powerful."

"Exactly," agreed Stover. "It happens that I was sure of his guilt only when I heard that he had possession of that transcribed will. It had been lost. I knew it had been tampered with. So Fielding must have hidden and changed it. The rest of the picture filled itself in. But his position of power was really his downfall. It became more and more evident that a man of supreme power was guilty."

"You started that train of thought when you first said that only one of the High-tower set could have done it," remembered Buckalew.

"Yes. Police secrets, scientific knowledge, a dozen other difficult things, were wielded as weapons by the killer. Even without the evidence that turned up, we could have canceled one suspect after another because of their weaknesses, until we came to the first citizen of Pulambar —Brome Fielding."

Buckalew nodded gravely. "A rationalization worthy of your grandfather, Dillon. You'll start back to work now?"

"Almost at once. I'm going to finish that condenser apparatus, and make Mars fertile again. The Malbrook-Fielding fortune, founded on water monopoly, won't long survive its owners. But," and Stover waved the topic away, "we're celebrating now, aren't we?"

"We are," said Buckalew. "What then? Shall I order a joy-lamp for you two susceptibles?"

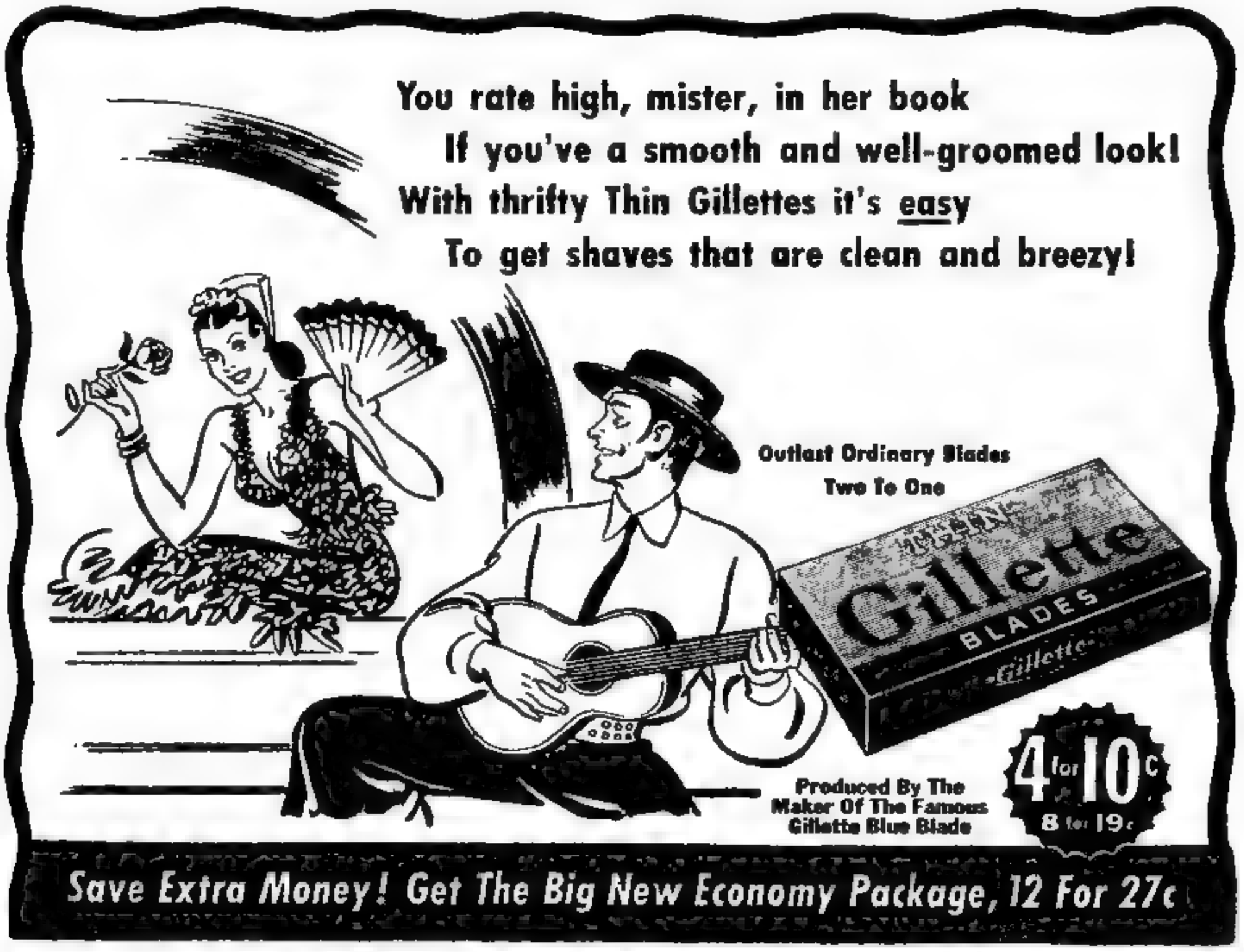
Stover turned and looked very fondly at Bee.

"Your eyes are joy-lamp enough," he told her gently, "for me for the rest of my life."

•

Next Issue: TARNISHED UTOPIA, an Amazing Full-Length Novel of the Future by MALCOLM JAMESON

•


You rate high, mister, in her book
If you've a smooth and well-groomed look!
With thrifty Thin Gillettes it's easy
To get shaves that are clean and breezy!
Outlast Ordinary Blades
Two To One
Gillette
BLADES
Produced By The
Maker Of The Famous
Gillette Blue Blade
4 for 10c
8 for 19c
Save Extra Money! Get The Big New Economy Package, 12 For 27c

Thumbnail Sketches of Great Men and Achievements

By OSCAR J. FRIEND

QUICK AS A FLASH

THE old man was reading again to his family from the First Book of Moses:

"And God said, Let there be light: and there was light."

The earnest-faced little boy at the old man's knee spoke up.

"How long did that take, *Grossvater?*"

The oldster marked the place with his finger and then frowned at his grandson. Little Ole was a perpetual question mark that sorely taxed Grandfather Roemer's knowledge and patience. But the old man never reprimanded the boy for asking questions. That, he knew, was the way to learn.

Ole Roemer

"How long did what take, my child?" he asked.

"For the light to come when God commanded it."

"That is something the Book does not tell us, Ole. Perhaps a minute, perhaps in a flash—perhaps a year. Time did not matter, for a thousand years were as a day to our Lord."

The little voice was hushed, and *Grossvater* Roemer read on. But little Ole Roemer was not satisfied. Doubtless the prophet, Moses, had been too busy recording the works and words of God to trouble with such minor details as to how the phenomenon of light was made manifest; how long it took—or even just what it was—but to the curious and mathematical mind of this child born at Aarhuus, Jutland, in 1644 these things were important. But if *Grossvater* Roemer could not tell him the answer there was no way to know. For *Grossvater* was the wisest man in town.

In this case, little Ole was right. For it was the year 1654, A.D. Although such mental giants and astronomers as Newton, Halley and Flamsteed were already living, nobody had yet found a way to measure the velocity of light. Thus, Ole Roemer grew to young manhood with his question unanswered.

It was while he was the pupil and amanuensis of Erasmus Bartholinus of Copenhagen that he discovered other men had asked the same question for many centuries before him. Even the great Galileo had tried to solve the problem by placing two trained observers on mountain tops a couple of miles apart, on a clear, moonless night.

Galileo's plan was for his first observer to swing his lantern. The instant the second observer saw the light, he was to swing his own lantern in response. Galileo attempted to note the time transpiring between the swings, thus establishing the speed at which light traveled across the intervening two miles of space. To his faint surprise, allowing a fraction of an instant for the muscular reflexes of his second observer, the result was practically instantaneous. There was neither watch nor eye fast enough to record the time elapsed.

This little story of Galileo remained

with Ole Roemer through the advancing years. If there was a time lag in the transmission of light, why hadn't the great Galileo discovered it? Was light, after all, an instantaneous phenomenon of Nature? Had the first scientific law on light, propounded by Hero of Alexandria, that a light ray took the shortest possible course between object and eye been merely an idle theory? Had the discovery of the law of refraction by Snell in 1621 and promulgated by Descartes meant nothing?

After all, who cared? What difference did it make?

Ole Roemer himself cared. And it made all the difference in the world to him. For Ole had become a student of astronomy, and that science was based on the theory of light itself.

When he was only twenty-seven years old, young Roemer assisted J. Picard to determine the position of Tycho Brahe's observatory on the island of Hveen. The following year he went to Paris with Picard and spent nine years at the new royal observatory there, years interrupted by hydraulic work at Versailles and Marly. But ever the question of the velocity of light and the magnificent failure of Galileo to solve the problem harried him.

By this time astronomers had more or less definitely fixed the orbits of most of the planets and their moons, and it was pretty generally known just how long it took a given planet to complete a revolution around the Sun. Ole Roemer threw himself into an exhaustive study of the Solar System. He was checking the rotations of Jupiter's moons in 1676 when he noticed that the time of their eclipses varied from schedule.

It was here that the great idea came to him. Gestating from the moment that child had asked that question at his grandfather's knee, fed by the failure of Galileo, the solution to the problem was born full-grown.

Breathlessly but painstakingly checking his figures on the variations of the eclipses of the Jovian moons, he discovered that during one part of the year there was a difference in the intervals between the eclipses of one moon of sixteen minutes and twenty-six seconds. The only logical answer to this puzzle had to be the difference in the distance between Earth and Jupiter at this time of the year, thereby giving the light from Jupiter's moon a greater distance to travel.

This extra distance between Earth and Jupiter's moon had already been agreed upon by most astronomers as being 183,889,000 miles. After a careful verification of the 16 minutes and 26 seconds lag in the moon's eclipse, it was simple arithmetic for Roemer to reduce the time to 986 seconds and divide this into the extra distance the light had to travel to reach Earth.

The answer was that light traveled at the astonishing rate of 186,600 miles per second, a figure which Ole Roemer announced in 1679 and which has been closely verified numerous times since.

At last Ole Roemer had answered his own question where even the great Galileo had failed. But Galileo had attempted to measure a giant with a midget's rule. Roemer had used the Solar System itself as his mighty yardstick!

"Not quick as a flash, *Grossvater*," he murmured aloud, "but almost. God said, 'Let there be light'—at the rate of one hundred eight-six thousand, six hundred miles per second."

SECRETS OF THE SPECTROSCOPE

IT was a cold day that thirty-first of March, 1811, in the village of Göttingen, Germany, when a baby boy was born to the wife of good burgher Herr Bunsen. But the lusty squalls of the infant rivaled the gusty winds which swirled under the eaves and occasionally drove a cloud of wood smoke into the room out of the fireplace.

After all the excitement attendant on such an event had subsided, the proud father was permitted to inspect his son. Awkwardly he held the infant and quieted its cries before the fireplace. Almost in fascination the baby seemed lulled by the crackling of logs and the roseate glow of firelight upon its tiny red face.

"See, Mama," spoke the father, "how he likes the warmth of the good wood-fire. Perhaps a fine woodman he will make."

"Such nonsense," said Frau Bunsen weakly. "My son is going to be a great man. We must see that he has a good education."

"Of course we shall," agreed Herr Bunsen, heartily. "And what name did we decide on? Robert Wilhelm, wasn't it? But the little rascal likes the fire. See, Mama?"

Perhaps there was something prophetic here. For little Robert Wilhelm crawled into childhood and toddled into boyhood and ran into youth with a complete and lively interest in all things pertaining to pyrotechnics. Before he died he was to leave his mark indelibly on equipment in all scientific laboratories and in every modern kitchen of the world which used combustible fuel. For, among other inventions and discoveries, he was to perfect the Bunsen Burner.

But it was not until he was occupying the chair of professor of chemistry at Heidelberg University in 1854 that he met and teamed up with the man with whom he was to make an immortal discovery.

In the little village of Königsberg, Prussia, in the same month of March, but some thirteen years after the birth of Bunsen, another baby boy was born who bore the name of Gustav Robert Kirchoff.

One day as the child lay in his cradle, uncertainly wobbling chubby little arms and legs around, the father came into the nursery to gaze upon his son. The nurse had carefully drawn the window drapes so that the strong light would not be too much for the infant's eyes. One shaft of

Robert Wilhelm Bunsen

sunlight fell athwart the crib, marked by a dancing stream of dust motes in the beam.

The father stopped short and stared in amusement.

"Look, *Mütter*," he said, chuckling, "see how our son tries to grasp the beam of sunlight. He tries to trap it in his little hands."

Odd, indeed, that two men were born in the same month, were both given the name of Robert, and were both attracted by light. And fortunate, indeed, for the world that both occupied chairs in the same great university during the same twenty years of time.

Kirchoff became professor of physics in 1854. Something flashed between these two men of fire upon their first meeting. Perhaps they both liked the same type of beer. Doubtless they both sang the same songs with the Heidelberg students who drank beer and duelled and absorbed knowledge at the feet of the masters. Whatever it was, Bunsen and Kirchoff began to do research work together.

The time came inevitably when the field of astrophysics was touched upon. They traced the noble history of the telescope, of the spectrum, of the various stellar theories. It was Bunsen who wistfully repeated the words of the celebrated French philosopher, Auguste Comte.

"'There are some things of which the human race must forever remain in ignorance; for example, the chemical compositions of the heavenly bodies,'" he said.

Kirchoff looked startled. Then he smiled. And he quoted the old nursery rhyme familiar to every child in every civilized country.

"Twinkle, twinkle, little star,
How I wonder what you are.
Up above the world so high,
Like a diamond in the sky."

"But I am serious, Kirchoff," protested Bunsen. "I've often wondered what sort of fire the sun consists of. Newton proved the law of the spectral colors. In eighteen-two Wollaston discovered that if the beam of light were passed through a narrow slit instead of a round hole that numerous vertical lines showed among the colors, lines which never vary in design."

"True," replied Kirchoff, instantly grave. "Then Joseph Von Frauenhofer counted and classified more than three hundred of these mysterious lines. And in eighteen forty-three Doppler noted that they shifted toward the red in the receding limb of the rotating sun, and toward the violet in the advancing limb."

"And John Draper made a great step a few years ago when he found that these lines could be photographed. He counted more than two thousand of them in this manner—but I suppose you have read his papers on the subject."

"Of course, but what good does all this do us," said Kirchoff with a shrug. "There is no way yet known of applying these discoveries. Nobody knows how to correlate or interpret the colorful, lined spectrum in understandable terms. There is no common medium of comparison. We don't know how to read the secret of these lines in themselves. The spectrum is just a toy of astronomy."

Bunsen sighed. "Yes," he agreed sadly, "it is just a toy. And I just have dreams."

For a moment there was silence. Then:

"I, too, have dreams, Professor Bunsen," admitted Kirchoff softly.

And dreams they remained while the two friends delved into various branches of research. Until the dark and gloomy day they worked late in the laboratory, seeking out some of the obscure salts of sodium. In a porcelain crucible Professor Bunsen was reducing a metallic salt of sodium to an irreducible powder when suddenly the crucible split, and the chemical caught on fire.

It glowed and then flared up redly, burning with a fierce, hot flame. In the failing light Robert Kirchoff blinked at the flame.

"It is as fiery as the heart of the setting sun," he murmured.

"Yes, the sun," agreed Professor Bunsen wearily, thinking of all the time now lost because of a broken porcelain.

And then both men jerked and stared at each other, their eyes going wide in the same queer speculation. Without speaking another word, Kirchoff leaped down from the tall lab stool and rushed to procure a

prism glass.

When he returned, Bunsen had already darkened the room and was preparing another compound of sodium. Hastily they made their arrangements. They were go-

Gustav Robert Kirchoff

ing to attempt to pass a ray of sodium fire through the prism!

In a few minutes all was in readiness. With bated breath they watched while the sodium leaped into fiery flame. Then the focusing of the prism glass. An adjustment or two—and behold! On the wall beyond them had spread the familiar fan of the magic spectrum of colors belonging to the sun.

A slot instead of a hole! A camera! And lines—lines of the telltale spectrum in the proper pattern. A miracle had taken place under their eyes. A common medium had been found to read the story of the sun.

"Kirchoff, my friend, there is sodium in the sun!" shouted Bunsen.

"Let us try another inflammable metal," said the practical and methodical Kirchoff.

They did—and the mystery of the sun and of the stars was no longer a mystery. The spectrum had at last yielded up its secret. There were long days of research ahead, but the last great hurdle had been taken. The spectroscope, that Rosetta Stone of the stars, had been fully born. Only a matter of time remained to prove irrefutably that the sun and the farthest star visible were composed of all or parts of the ninety-two fundamental elements as worked out through another venerable branch of science and finally tabulated by Henry Moseley.

"Twinkle, twinkle, little star," paraphrased Kirchoff happily. "Now we'll know just what you are. What do you think, Professor Bunsen?"

"I think," said the great chemistry professor, nervously wiping his perspiring brow, "that we should go down to the tavern and drink a glass of beer."

OXYGEN FOR PEGASUS

RAT-TAT-TAT-TAT! Rat-tat-tat-tat! Vibrating out its rhythm of power, the rock drill, driven by compressed air and guided by the muscular hands of the brawny miner, sank smoothly into the rock face of the ledge. A ten-year-old boy stood beside the mining engineer and watched the work with round-eyed interest.

"Plenty of power in those pneumatic drills, eh, son?" the engineer asked.

The boy nodded gravely. "Yes, sir," he answered. "But what makes it work, father? Just air?"

"Compressed air," Engineer Moss explained. "Mechanical science has learned to harness air as well as water and steam. I may not live to see the day, but you will, Sanford, when compressed air will drive a thousand tools for man. This is just the beginning."

The period was the early 1880s, and Engineer Moss was speaking truly of the things to come. Perhaps this keen mining engineer visualized the future with its air riveters, air hammers, suction machines, and all the various gadgets of compression and vacuum that were yet to be contrived to make life easier and more comfortable for mankind. But this was a hot day in the mining country in the eighties, and the boy had never seen an air hammer swiftly cutting a street of asphalt or a wall of concrete to pieces; he had yet to see the steel structure of a skyscraper rearing itself heavenward to the metallic symphony of scores of air-driven riveters. In fact, he had a lot to live to see—and a lot to accomplish. But he didn't know that. All he knew was that this pneumatic drill was operated by a special sort of air-pump, and he was deeply interested.

"I'm going to know all about this drill," he declared solemnly. "When I grow up I'm going to make air compressors."

The father chuckled indulgently. "Make a good one, son, and you may drill out a fortune. It might be a better way to make

a living at that than being a mining engineer."

Then he dismissed the matter as another boyish ambition to be classed with becoming a locomotive engineer or a fireman wearing a red hat.

But this dream of an air-pump was not a passing fancy with the boy. It remained with him, growing through the years. At the age of sixteen Sanford apprenticed himself to the manufacturer of the air compressor. His dream was crystallizing into fact.

He worked hard, learning all there was to know about putting this particular instrument together. Then he tried to improve on the machine. There he encountered his first serious set-back. He didn't know enough theory to experiment. He needed some technical engineering.

Undaunted, he applied at the University of California, taking a job as janitor of the machine shop and doing other odd jobs to pay for his tuition. In his third year at college he finally invented a gas turbine which combined the principles of the steam turbine and the internal combustion engine. His radical departure from standard design was that the burning fuel spun the blades of a circular turbine instead of the combustion force driving a piston.

At last he had invented something even though it was along divergent lines from the air compressor of his boyhood dreams. Proudly he made his first model and set the machine to work. To his delight it ran. But then came bitter disappointment. When he tried to harness the engine to deliver usable power it coughed miserably and died. It would run itself, but it had no power left over to deliver. It was worse than a perpetual motion machine, for it required a certain amount of power to run.

Young Sanford could not get over this fiasco. The engine was sadly confined to a shelf to gather dust and memories. But, after graduation he went to Cornell U., partly to teach and partly to find out why his turbine wasn't practical. From here he went to work for General Electric, which company permitted him to continue his research in turbine theory and construction.

In succession he worked on a new centrifugal air compressor, the steam turbine, and other things. The glorious invention of his youth dropped into the limbo of things best forgotten.

And then came that day in 1917 when American army engineers took cognizance of the European experiments with superchargers for aeroplanes and came to General Electric for aid. At high altitudes airplane motors lost more than half of their power due to lack of air. To maintain ground power, combustible mixture must be compressed so as to be delivered to the cylinders always at normal atmospheric density, regardless of the aerial height.

A gear-driven compressor was being used in Europe with a certain amount of success, but this was not as flexible as it should have been. One difficulty was that the necessary high gear ratio of about ten to one made the inertia of the blower rotor enormous and caused constant stripping of the gears on very sudden starting-up of the engines.

Dr. Moss thought of his beloved gas turbine. If he could harness that to the exhaust blasts of an airplane motor, the waste exhaust gases would suffice to drive the blades, and he could deliver power after all, in this case, power to compress air to help fuel the carburetors of the motor.

Trembling with hope, he brought forth his invention, dusted it off, and supervised its connection to a Liberty motor, fixing the turbine so that it drove a high-speed centrifugal air compressor. Then the motor was tested. The result surpassed every hope.

Quickly the army engineers arranged a test at the top of Pike's Peak where the thin air approximated the conditions of flying at the 14,000-foot level. The turbosupercharger behaved like smooth cream. The 350-horsepower motor, dropping almost to half-efficiency without the Moss invention, developed 356 horsepower with it. At last Dr. Sanford A. Moss had brought his boyhood dream to fruitful harvest.

There remained only the necessity of providing turbine rotor blades which would stand the constant exposure to the hot exhaust gases and at those temperatures retain a strength adequate for a speed rotation of about 30,000 revolutions per minute. With this problem solved, the Moss turbosupercharger would be far superior to the gear-driven types which had to receive their power from the main engine. The Moss invention not only would make use of what would otherwise be largely wasted energy, but would be flexible and automatically self-adjusting at all speeds.

Before things could get under production the Armistice was signed, and once more Dr. Moss and his invention was forgotten. Resigned by this time to the buffeting whims of fortune, the lively inventor with his pointed beard went back to his routine work.

And then came the day in 1938 when a madman named Hitler began dropping bombs on Poland. Experts and technicians looked on aghast as panzer divisions collapsed opposition and supercharger-equipped pursuit planes had enemy bombing planes at their mercy. Then somebody remembered Dr. Moss and his turbosupercharger.

This time there was no impediment in the road. At last the Moss turbosupercharger came into its own, opening a new ceiling for American planes. Among the first planes delivered to England under the Lease-Lend Bill and all-out aid for Britain were ships equipped with this supercharger.

(Concluded on page 129)

CHRISTMAS ON GANYMEDE

By ISAAC ASIMOV

Author of "Half-Breed," "Heredity," etc.

"Here, pussy, pussy, pussy, pussy, pussy!" urged Johnson hopefully. "Here, Fido!"

The Yuletide Season Brings Turmoil on Jupiter's Moon and Ill Will Toward Everybody When Olaf Johnson Gets Sentimental!

OLAF Johnson hummed nasally to himself and his china-blue eyes were dreamy as he surveyed the stately fir tree in the corner of the library. Though the library was the largest single room in the Dome, Olaf felt it none too spacious for the occasion. Enthusiastically he dipped into the huge crate at his side and took out the first roll of red-and-green crêpe paper.

What sudden burst of sentiment had inspired the Ganymedan Products Corporation, Inc., to ship a complete collection of Christmas decorations to the Dome, he did not pause to inquire.

Olaf's was a placid disposition, and in his self-imposed job as chief Christmas decorator, he was content with his lot.

He frowned suddenly and muttered a curse. The General Assembly signal light was flashing on and off hysterically. With a hurt air Olaf laid down the tack-hammer he had just lifted, then the roll of crêpe paper, picked some tinsel out of his hair and left for officers quarters.

Commander Scott Pelham was in his deep armchair at the head of the table when Olaf entered. His stubby fingers were drumming unrhythmically upon the glass-topped table. Olaf met the commander's hotly furious eyes without fear, for nothing had gone wrong in his department in twenty Ganymedan revolutions.

The room filled rapidly with men and Pelham's eyes hardened as he counted noses in one sweeping glance.

"We're all here. Men, we face a crisis!"

There was a vague stir. Olaf's eyes sought the ceiling and he relaxed. Crises hit the Dome once a revolution, on the average. Usually they turned out to be a sudden rise in the quota of oxite to be gathered, or the inferior quality of the last batch of karen leaves. He stiffened, however, at the next words.

"In connection with the crisis, I have one question to ask." Pelham's voice was a deep baritone, and it rasped unpleasantly when he was angry. "What dirty imbecilic troublemaker has been telling those blasted Ossies fairy tales?"

Olaf cleared his throat nervously and thus immediately became the center of attention. His Adam's apple wobbled in sudden alarm and his forehead wrinkled into a washboard. He shivered.

"I—I—" he stuttered, quickly fell silent. His long fingers made a bewildered gesture of appeal. "I mean I was out there yesterday, after the last—uh—supplies of karen leaves, on account the Ossies were slow and—"

A deceptive sweetness entered Pelham's voice. He smiled.

"Did you tell those natives about Santa Claus, Olaf?"

THE smile looked uncommonly like a wolfish leer and Olaf broke down. He nodded convulsively.

"Oh, you did? Well, well you told them about Santa Claus! He comes down in a sleigh that flies through the air with eight reindeer pulling it, huh?"

"Well—er—doesn't he?" Olaf asked unhappily.

"And you drew pictures of the reindeer, just to make sure there was no mistake. Also, he has a long white beard and red clothes with white trimmings."

"Yeah, that's right," said Olaf, his face puzzled.

"And he has a big bag, chock full of presents for good little boys and girls, and he brings it down the chimney and puts presents inside stockings."

"Sure."

"You also told them he's about due, didn't you? One more revolution and he's going to visit us."

Olaf smiled weakly. "Yeah, Commander, I meant to tell you. I'm fixing up the tree and—"

"Shut up!" The commander was breathing hard in a whistling sort of way. "Do you know what those Ossies have thought of?"

"No, Commander."

Pelham leaned across the table toward Olaf and shouted:

"They want Santa Claus to visit *them!*"

Someone laughed and changed it quickly into a strangling cough at the commander's raging stare.

"And if Santa Claus doesn't visit them, the Ossies are going to quit work!" He repeated: "Quit cold—strike!"

There was no laughter, strangled or otherwise, after that. If there were more than one thought among the entire group, it didn't show itself. Olaf expressed that thought:

"But what about the quota?"

"Well, what about it?" snarled Pelham. "Do I have to draw pictures for you? Ganymedan Products has to get one hundred tons of wolframmite, eighty tons of karen leaves and fifty tons of oxite every year, or it loses its franchise. I suppose there isn't

anyone here who doesn't know that. It so happens that the current year ends in two Ganymedan revolutions, and we're five per cent behind schedule as it is."

There was pure, horrified silence.

"And now the Ossies won't work unless they get Santa Claus. No work, no quota, no franchise—no jobs! Get that, you low-grade morons. When the company loses its franchise, we lose the best-paying jobs in the System. Kiss them good-by, men, unless—"

He paused, glared steadily at Olaf, and added:

"Unless, by next revolution, we have a flying sleigh, eight reindeer and a Santa Claus. And by every cosmic speck in the rings of Saturn, we're going to have just that, especially a Santa!"

Ten faces turned ghastly pale.

"Got someone in mind, Commander?" asked someone in a voice that was three-quarters croak.

"Yes, as a matter of fact, I have."

He sprawled back in his chair. Olaf Johnson broke into a sudden sweat as he found himself staring at the end of a pointing forefinger.

"Aw, Commander!" he quavered.

The pointing finger never moved.

PELHAM tramped into the foreroom, removed his oxygen nosepiece and the cold cylinders attached to it. One by one he cast off thick woolen outer garments and, with a final, weary sigh, jerked off a pair of heavy knee-high space boots.

Sim Pierce paused in his careful inspection of the latest batch of karen leaves and cast a hopeful glance over his spectacles.

"Well?" he asked.

Pelham shrugged. "I promised them Santa. What else could I do? I also doubled sugar rations, so they're back on the job—for the moment."

"You mean till the Santa we promise doesn't show up." Pierce straightened and waved a long karen leaf at the commander's face for emphasis. "This is the silliest thing I ever heard of. It can't be done. There ain't no Santa Claus!"

"Try telling that to the Ossies." Pelham slumped into a chair and his expression became stonily bleak. "What's Benson doing?"

"You mean that flying sleigh he says he can rig up?" Pierce held a leaf up to the light and peered at it critically. "He's a crackpot, if you ask me. The old buzzard went down to the sub-level this morning and he's been there ever since. All I know is that he's taken the spare lectro-dissociator apart. If anything happens to the regular, it just means that we're without oxygen."

"Well," Pelham rose heavily, "for my part I hope we *do* choke. It would be an easy way out of this whole mess. I'm going down below."

He stumped out and slammed the door behind him.

In the sub-level he gazed about in bewilderment, for the room was littered with gleaming chrome-steel machine parts. It took him some time to recognize the mess as the remains of what had been a compact, snugly built lectro-dissociator the day before. In the center, in anachronistic contrast, stood a dusty wooden sleigh atop rust-red runners. From beneath it came the sound of hammering.

"Hey, Benson!" called Pelham.

A grimy, sweat-streaked face pushed out from underneath the sleigh, and a stream of tobacco juice shot toward Benson's ever-present cuspidor.

"What are you shouting like that for?" he complained. "This is delicate work."

"What the devil is that weird contraption?" demanded Pelham.

"Flying sleigh. My own idea, too." The light of enthusiasm shone in Benson's watery eyes, and the quid in his mouth shifted from cheek to cheek as he spoke. "The sleigh was brought here in the old days, when they thought Ganymede was covered with snow like the other Jovian moons. All I have to do is fix a few gravo-repulsors from the dissociator to the bottom and that'll make it weightless when the current's on. Compressed air-jets will do the rest."

The commander chewed his lower lip dubiously.

"Will it work?"

"Sure it will. Lots of people have thought of using repulsors in air travel, but they're inefficient, especially in heavy gravity fields. Here on Ganymede, with a field of one-third gravity and a thin atmosphere, a child could run it. Even Johnson could run it, though I wouldn't mourn if he fell off and broke his blasted neck."

"All right, then, look here. We've got lots of this native purplewood. Get Charlie Finn and tell him to put that sleigh on a platform of it. He's to have it extend about twenty feet or more frontward, with a railing around the part that projects."

Benson spat and scowled through the stringy hair over his eyes.

"What's the idea, Commander?"

Pelham's laughter came in short, harsh barks.

"Those Ossies are expecting reindeer, and reindeer they're going to have. Those animals will have to stand on something, won't they?"

"Sure . . . But wait, hold on! There aren't any reindeer on Ganymede."

Commander Pelham paused on his way out. His eyes narrowed unpleasantly as they always did when he thought of Olaf Johnson.

"Olaf is out rounding up eight spinybacks for us. They've got four feet, a head on one end and a tail on the other. That's close enough for the Ossies."

The old engineer chewed this information and chuckled nastily.

"Good! I wish the fool joy of his job."

"So do I," gritted Pelham.

He stalked out as Benson, still leering, slid underneath the sleigh.

THE commander's description of a spinyback was concise and accurate, but it left out several interesting details. For one thing, a spinyback has a long, mobile snout, two large ears that wave back and forth gently, and two emotional purple eyes. The males have pliable spines of a deep crimson color along the backbone that seem to delight the female of the species. Combine these with a scaly, muscular tail and a brain by no means mediocre, and you have a spinyback—or at least you have one if you can catch one.

It was just such a thought that occurred to Olaf Johnson as he sneaked down from the rocky eminence toward the herd of twenty-five spinybacks grazing on the sparse, gritty undergrowth. The nearest spinies looked up as Olaf, bundled in fur and grotesque with attached oxygen nosepiece, approached. However, spinies have no natural enemies, so they merely gazed at the figure with languidly disapproving eyes and returned to their crunchy but nourishing fare.

Olaf's notions on bagging big game were sketchy. He fumbled in his pocket for a lump of sugar, held it out and said:

"Here, pussy, pussy, pussy, pussy, pussy!"

The ears of the nearest spinie twitched in annoyance. Olaf came closer and held out the sugar again.

"Come, bossy! Come, bossy!"

The spinie caught sight of the sugar and rolled his eyes at it. His snout twitched as he spat out his last mouthful of vegetation and ambled over. With neck stretched out, he sniffed. Then, using a rapid, expert motion, he struck at the outheld palm and flipped the lump into his mouth. Olaf's other hand whistled down upon nothingness.

With a hurt expression, Olaf held out another piece.

"Here, Prince! Here, Fido!"

The spinie made a low, tremulous sound deep in his throat. It was a sound of pleasure. Evidently this strange monstrosity before him, having gone insane, intended to feed him these bits of concentrated succulence forever. He snatched and was back as quickly as the first time. But, since Olaf had held on firmly this time, the spinie almost bagged half a finger as well.

Olaf's yell lacked a bit of the nonchalance necessary at such times. Nevertheless, a bite that can be felt through thick gloves is a *bite!*

He advanced boldly upon the spinie. There are some things that stir the Johnson blood and bring up the ancient spirit of the Vikings. Having

one's finger bitten, especially by an unearthly animal, is one of these.

There was an uncertain look in the spinie's eyes as he backed slowly away. There weren't any white cubes being offered any more and he wasn't quite sure what was going to happen now. The uncertainty vanished with a suddenness he did not expect, when two glove-muffled hands came down upon his ears and jerked. He let out a high-pitched yelp and charged forward.

A SPINIE has a certain sense of dignity. He doesn't like to have his ears pulled, particularly when other spinies, including several unattached females, have formed a ring and are looking on.

The Earthman went over backward and remained in that position for awhile. Meantime, the spinie backed away a few feet in a gentlemanly manner and allowed Johnson to get to his feet.

The old Viking blood frothed still higher in Olaf. After rubbing the hurt spot where he had landed on his oxygen cylinder, he jumped, forgetting to allow for Ganymedean gravity. He sailed five feet over the spinie's back.

There was awe in the animal's eye as he watched Olaf, for it was a stately jump. But there was a certain amount of bewilderment as well. There seemed to be no purpose to the maneuver.

Olaf landed on his back again and got the cylinder in the same place. He was beginning to feel a little embarrassed. The sounds that came from the circle of onlookers were remarkably like snickers.

"Laugh!" he muttered bitterly. "I haven't even begun to fight yet."

He approached the spinie slowly, cautiously. He circled, watching for his opening. So did the spinie. Olaf feinted and the spinie ducked. Then the spinie reared and Olaf ducked.

Olaf kept remembering new profanity all the time. The husky "Ur-r-r-r-r" that came out the spinie's throat seemed to lack the brotherly spirit that is usually associated with Christmas.

There was a sudden, swishing sound. Olaf felt something collide with his skull, just behind his left ear. This time he turned a back somersault and landed on the nape of his neck. There was a chorused whinny from the onlookers, and the spinie waved his tail triumphantly.

Olaf got rid of the impression that he was floating through a star-studded unlimited space and wavered to his feet.

"Listen," he objected, "using your tail is a foul!"

He leaped back as the tail shot forward again, then flung himself forward in a diving tackle. He grabbed at the spinie's feet and felt the animal come down on his back with an indignant yelp.

Now it was a case of Earth muscles against Ganymedan muscles, and Olaf became a man of brute strength. He struggled up, and the spinie found himself slung over the stranger's shoulders.

The spinie objected vociferously and tried to prove his objections by a judicious whip of the tail. But he was in an inconvenient position and the stroke whistled harmlessly over Olaf's head.

The other spinies made way for the Earthman with saddened expressions. Evidently they were all good friends of the captured animal and hated to see him lose a fight. They returned to their meal in philosophic resignation, plainly convinced that it was kismet.

On the other side of the rocky ledge, Olaf reached his prepared cave. There was the briefest of scrambling struggles before he managed to sit down hard on the spinie's head and put enough knots into rope to hold him there.

A few hours later, when he had corralled his eighth spinyback, he possessed the technique that comes of long practice. He could have given a Terrestrial cowboy valuable pointers on throwing a maverick. Also, he could have given a Terrestrial stevedore lessons in simple and compound swearing.

'Twas the night before Christmas —and all through the Ganymedan

Dome there was deafening noise and bewildering excitement, like an exploding nova equipped for sound. Around the rusty sleigh, mounted on its huge platform of purplewood, five Earthmen were staging a battle royal with a spinie.

The spinie had definite views about most things, and one of his stubbornest and most definite views was that he would never go where he didn't want to go. He made that clear by flailing one head, one tail, three spines and four legs in every possible direction, with all possible force.

But the Earthmen insisted, and not gently. Despite loud, agonized squeaks, the spinie was lifted onto the platform, hauled into place and harnessed into hopeless helplessness.

"Okay!" Peter Benson yelled. "Pass the bottle."

Holding the spinie's snout with one hand, Benson waved the bottle under it with the other. The spinie quivered eagerly and whined tremulously. Benson poured some of the liquid down the animal's throat. There was a gurgling swallow and an appreciative whinny. The spinie's neck stretched out for more.

Benson sighed. "Our best brandy, too."

He up-ended the bottle and withdrew it half empty. The spinie, eyes whirling in their sockets rapidly, did what seemed an attempt at a gay jig. It didn't last long, however, for Ganymedan metabolism is almost immediately affected by alcohol. His muscles locked in a drunken rigor and, with a loud hiccup, he went out on his feet.

"Drag out the next!" yelled Benson.

In an hour the eight spinybacks were so many cataleptic statues. Forked sticks were tied around their heads as antlers. The effect was crude and sketchy, but it would do.

As Benson opened his mouth to ask where Olaf Johnson was, that worthy showed up in the arms of three comrades, and he was putting up as stiff a fight as any spinie. His objections, however, were highly articulate.

"I'm not going anywhere in this costume!" he roared, gouging at the nearest eye. "You hear me?"

There certainly was cause for objection. Even at his best, Olaf had never been a heart-throb. But in his present condition, he resembled a hybrid between a spinie's nightmare and a Picassian conception of a patriarch.

He wore the conventional costume of Santa. His clothes were as red as red tissue paper sewed onto his space coat could make it. The "ermine" was as white as cotton wool, which it was. His beard more cotton wool glued onto a linen foundation, hung loosely from his ears. With that below and his oxygen nosepiece above, even the strongest were forced to avert their eyes.

Olaf had not been shown a mirror. But, between what he could see of himself and what his instinct told him, he would have greeted a good, bright lightning bolt like a brother.

By fits and starts, he was hauled to the sleigh. Others pitched in to help, until Olaf was nothing but a smothered squirm and a muffled voice.

"Leggo," he mumbled. "Leggo and come at me one by one. Come on!"

He tried to spar a bit, to point his dare. But the multiple grips upon him left him unable to wriggle a finger.

"Get in!" ordered Benson.

"You go to hell!" gasped Olaf. "I'm not getting into any patented short-cut to suicide, and you can take your bloody flying sleigh and—"

"Listen," interrupted Benson, "Commander Pelham is waiting for you at the other end. He'll skin you alive if you don't show up in half an hour."

"Commander Pelham can take the sleigh sideways and—"

"Then think of your job! Think of a hundred and fifty a week. Think of every other year off with pay. Think of Hilda, back on Earth, who isn't going to marry you without a job. Think of all that!"

JOHNSON thought, snarled. He thought some more, got into the sleigh, strapped down his bag and turned on the gravo-repulsors. With a horrible curse, he opened the rear jet.

The sleigh dashed forward and he caught himself from going backward, over and out of the sleigh, by two-thirds of a whisker. He held onto the sides thereafter, watching the surrounding hills as they rose and fell with each lurch of the unsteady sleigh.

As the wind rose, the undulations grew more marked. And when Jupiter came up, its yellow light brought out every jag and crag of the rocky ground, toward every one of which, in turn, the sleigh seemed headed. And by the time the giant planet had shoved completely over the horizon, the curse of drink — which departs from the Ganymedan organism just as quickly as it descends—began removing itself from the spinies.

The hindmost spinie came out of it first, tasted the inside of his mouth, winced and swore off drink. Having made that resolution, he took in his immediate surroundings languidly. They made no immediate impression on him. Only gradually was the fact forced upon him that his footing, whatever it was, was not the usual stable one of solid Ganymede. It swayed and shifted, which seemed very unusual.

Yet he might have attributed this unsteadiness to his recent orgy, had he not been so careless as to drop his glance over the railing to which he was anchored. No spinie ever died of heart-failure, as far as is recorded but, looking downward, this one almost did.

His agonized screech of horror and despair brought the other spinies into full, if headachy, consciousness. For awhile there was a confused blur of squawking conversation as the animals tried to get the pain out of their heads and the facts in. Both aims were achieved and a stampede was organized. It wasn't much of a stampede, because the spinies were anchored tightly. But, except for the fact that they got nowhere, they went through all the motions of a full gallop. And the sleigh went crazy.

Olaf grabbed his beard a second before it let go of his ears.

"Hey!" he shouted.

It was something like saying "Tut, tut" to a hurricane.

The sleigh kicked, bucked and did a hysterical tango. It made sudden spurts, as if inspired to dash its wooden brains out against Ganymede's crust. Meanwhile Olaf prayed, swore, wept and jiggled all the compressed air jets at once.

Ganymede whirled and Jupiter was a wild blur. Perhaps it was the spectacle of Jupiter doing the shimmy that steadied the spinies. More likely it was the fact that they just didn't give a hang any more. Whatever it was, they halted, made lofty farewell speeches to one another, confessed their sins and waited for death.

The sleigh steadied and Olaf resumed his breathing once more. Only to stop again as he viewed the curious spectacle of hills and solid ground up above, and black sky and swollen Jupiter down below.

It was at this point that he, too, made his peace with the eternal and awaited the end.

"OSSIE" is short for ostrich, and that's what native Ganymedans look like, except that their necks are shorter, their heads are larger, and their feathers look as if they were about to fall out by the roots. To this add a pair of scrawny, feathered arms with three stubby fingers apiece. They can speak English, but when you hear them, you wish they couldn't.

There were fifty of them in the low purplewood structure that was their "meeting hall." On the mound of raised dirt in the front of the room—dark with the smoky dimness of burning purplewood torches and fetid to boot—sat Commander Scott Pelham and five of his men. Before them strutted the frowziest Ossie of them all, inflating his huge chest with rhythmic, booming sounds.

He stopped for a moment and pointed to a ragged hole in the ceiling.

"Look!" he squawked. "Chimney. We make. Sannycaws come in."

Pelham grunted approval. The Ossie clucked happily. He pointed to the little sacks of woven grass that hung from the walls.

"Look! Stockies. Sannycaws put presets!"

"Yeah," said Pelham unenthusiastically. "Chimney and stockings. Very nice." He spoke out of the corner of his mouth to Sim Pierce, who sat next to him: "Another half-hour in this dump will kill me. When is that fool coming?"

Pierce stirred uneasily.

"Listen," he said, "I've been doing some figuring. We're safe on everything but the karen leaves, and we're still four tons short on that. If we can get this fool business over with in the next hour, so we can start the next shift and work the Ossies at double, we can make it." He leaned back. "Yes, I think we can make it."

"Just about," replied Pelham gloomily. "That's if Johnson gets here without pulling another bloomer."

The Ossie was talking again, for Ossies like to talk. He said:

"Every year Kissmess comes. Kissmess nice, evvybody friendly. Ossie like Kissmess. You like Kissmess?"

"Yeah, fine," Pelham snarled politely. "Peace on Ganymede, good will toward men — especially Johnson. Where the devil is that idiot, anyhow?"

HE FELL into an annoyed fidget, while the Ossie jumped up and down a few times in a thoughtful sort of manner, evidently for the exercise of it. He continued the jumping, varying it with little hopping dance steps, till Pelham's fists began making strangling gestures. Only an excited squawk from the hole in the wall, dignified by the term "window," kept Pelham from committing Ossie-slaughter.

Ossies swarmed about and the Earthmen fought for a view.

Against Jupiter's great yellowness was outlined a flying sleigh, complete with reindeers. It was only a tiny thing, but there was no doubt about it. Santa Claus was coming.

There was only one thing wrong with the picture. The sleigh, "reindeer" and all, while plunging ahead at a terrific speed, was flying upside down.

The Ossies dissolved into squawking cacophony.

"Sannycaws! Sannycaws! Sannycaws!"

They scrambled out the window like so many animated dust-mops gone mad. Pelham and his men used the low door.

The sleigh was approaching, growing larger, lurching from side to side and vibrating like an off-center flywheel. Olaf Johnson was a tiny figure holding on desperately to the side of the sleigh with both hands.

PELHAM was shouting wildly, incoherently, choking on the thin atmosphere every time he forgot to breathe through his nose. Then he stopped and stared in horror. The sleigh, almost life-size now, was dipping down. If it had been an arrow shot by William Tell, it could not have aimed between Pelham's eyes more accurately.

"Everybody down!" he shrieked, and dropped.

The wind of the sleigh's passage whistled keenly and brushed his face. Olaf's voice could be heard for an instant, high-pitched and indistinct. Compressed air spurted, leaving tracks of condensing water vapor.

Pelham lay quivering, hugging Ganymede's frozen crust. Then, knees shaking like a Hawaiian hula-girl, he rose slowly. The Ossies who had scattered before the plunging vehicle had assembled again. Off in the distance, the sleigh was veering back.

Pelham watched as it swayed and hovered, still rotating. It lurched toward the dome, curved off to one side, turned back, and gathered speed.

Inside that sleigh, Olaf worked like a demon. Straddling his legs wide, he shifted his weight desperately. Sweating and cursing, trying hard not to look "downward" at Jupiter, he urged the sleigh into wilder and wilder swings. It was wobbling through an angle of 180 degrees now, and Olaf felt his stomach raise strenuous objections.

Holding his breath, he leaned hard with his right foot and felt the sleigh swing far over. At the extremity of that swing, he released the gravo-repulsor and, in Ganymede's weak gravity, the sleigh jerked downward.

Naturally, since the vehicle was bottom-heavy due to the metal gravo-repulsor beneath, it righted itself as it fell.

But this was little comfort to Commander Pelham, who found himself once more in the direct path of the sleigh.

"Down!" he yelled, and dropped again.

The sleigh *whi-i-ished* overhead, came up against a huge boulder with a *crack*, bounced twenty-five feet into the air, came down with a *rush* and a *bang*, and Olaf fell over the railing and out.

Santa Claus had arrived.

With a deep, shuddering breath, Olaf swung his bag over his shoulders, adjusted his beard and patted one of the silently suffering spinies on the head. Death might be coming — in fact, Olaf could hardly wait—but he was going to die on his feet nobly, like a Johnson.

Inside the shack, into which the Ossies had once more swarmed, a *thump* announced the arrival of Santa's bag on the roof, and a second *thud* the arrival of Santa himself. A ghastly face appeared through the makeshift hole in the ceiling.

"Merry Christmas!" it croaked, and tumbled through.

Olaf landed on his oxygen cylinders, as usual, and got them in the usual place.

The Ossies jumped up and down like rubber balls with the itch.

Olaf limped heavily toward the first stocking and deposited the garishly colored sphere he withdrew from his bag, one of the many that had originally been intended as a Christmas tree ornament. One by one he deposited the rest in every available stocking.

Having completed his job, he dropped into an exhausted squat, from which position he watched subsequent proceedings with a glazed and fishy eye. The jolliness and belly-shaking good humor, traditionally characteristic of Santa Claus, were absent from this one with remarkable thoroughness.

The Ossies made up for it by their wild ecstasy. Until Olaf had deposited the last globe, they had kept their silence and their seats. But when he had finished, the air heaved and writhed under the stresses of the discordant screeches that arose. In half a second the hand of each Ossie contained a globe.

They chattered among themselves furiously, handling the globes carefully and hugging them close to their chests. Then they compared one with another, flocking about to gaze at particularly good ones.

THE frowziest Ossie approached Pelham and plucked at the commander's sleeve. "Sannycaws good," he cackled. Look, he leave eggs!" He stared reverently at his sphere and said: "Pittier'n Ossie eggs. Must be Sannycaws eggs, huh?"

His skinny finger punched Pelham in the stomach.

"No!" yowled Pelham vehemently. "Hell, no!"

But the Ossie wasn't listening. He plunged the globe deep into the warmth of his feathers and said:

"Pitty colors. How long take for little Sannycaws come out? And what little Sannycaws eat?" He looked up. "We take good care. We teach little Sannycaws, make him smart and full of brain like Ossie."

Pierce grabbed Commander Pelham's arm.

"Don't argue with them," he whispered frantically. "What do you care if they think those are Santa Claus eggs? Come on! If we work like maniacs, we can still make the quota. Let's get started."

"That's right," Pelham admitted. He turned to the Ossie. "Tell everyone to get going." He spoke clearly and loudly. "Work now. Do you understand? Hurry, hurry, hurry! Come on!"

He motioned with his arms. But the frowzy Ossie had come to a sudden halt. He said slowly:

"We work, but Johnson say Kissmess come evvy year."

"Isn't one Christmas enough for you?" Pelham rasped.

"No!" squawked the Ossie. "We want Sannycaws next year. Get more eggs. And next year more eggs. And

next year. And next year, And next year. More eggs. More little Sannycaws eggs. If Sannycaws not come, we not work."

"That's a long time off," said Pelham. "We'll talk about it then. By that time I'll either have gone completely crazy, or you'll have forgotten all about it."

Pierce opened his mouth, closed it, opened his mouth, closed it, opened it, and finally managed to speak.

"Commander, they want him to come every year."

"I know. They won't remember by next year, though."

"But you don't get it. A year to them is one Ganymedan revolution around Jupiter. In Earth time, that's seven days and three hours. They want Santa Claus to come every *week.*"

"Every week!" Pelham gulped. "Johnson told them—"

For a moment everything turned sparkling somersaults before his eyes. He choked, and automatically his eye sought Olaf.

Olaf turned cold to the marrow of his bones and rose to his feet apprehensively, sidling toward the door. There he stopped as a sudden recollection of tradition hit him. Beard a-dangle, he croaked:

"Merry Christmas to all, and to all a good night!"

He made for the sleigh as if all the imps of Hades were after him. The imps weren't, but Commander Scott Pelham was.

☆

Read Our Companion Science Fiction Magazines

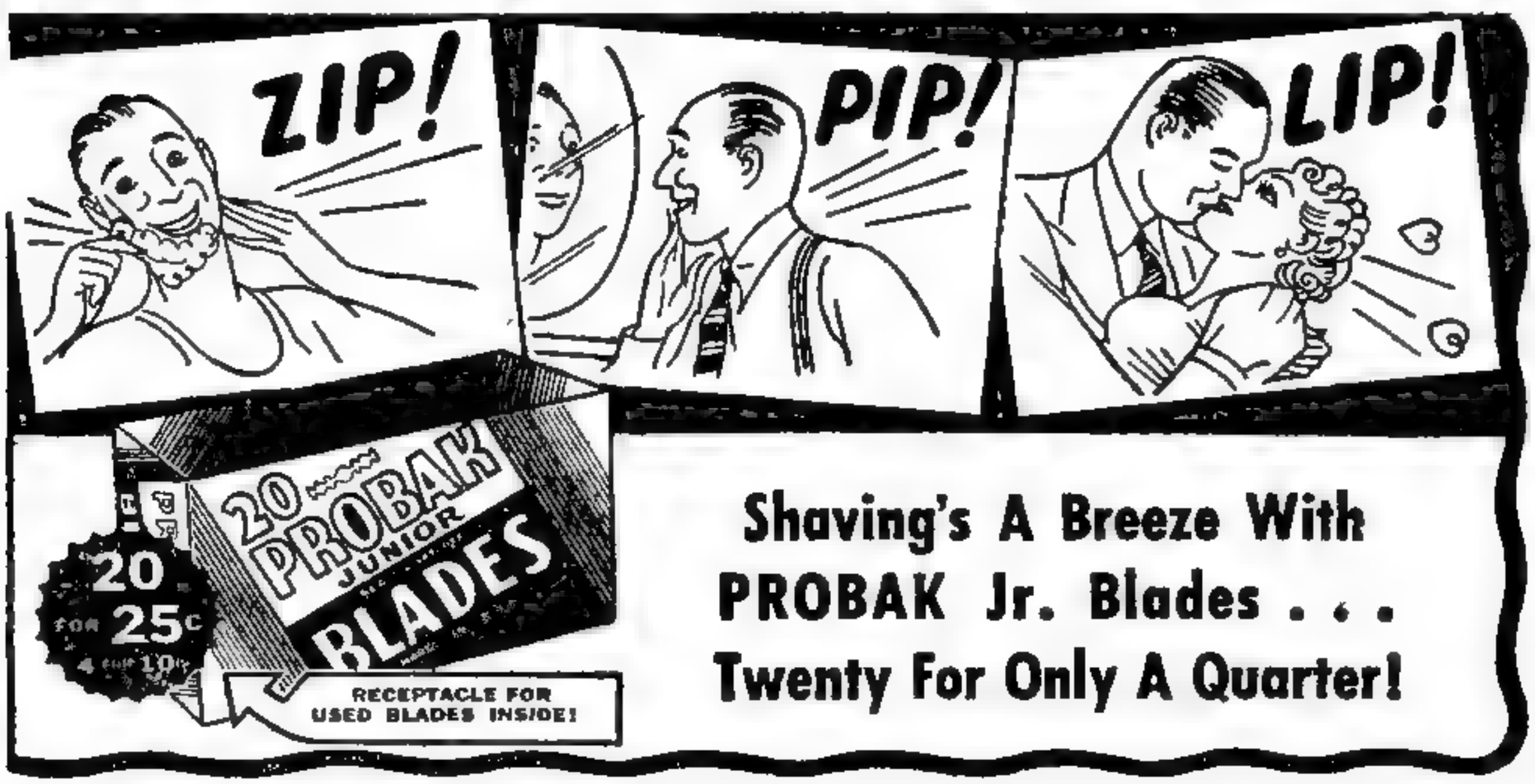
THRILLING WONDER STORIES

and

CAPTAIN FUTURE

Each 15c at All Stands

☆



SCIENCE Question BOX

THE CYCLOTRON

Editor, SCIENCE QUESTION BOX:

Just what, really, is the cyclotron and how can it be put to practical use?—K. J., Memphis, Tenn.

The discovery of the cyclotron, popularly called the "atom-smasher," was one of the outstanding events of 1939. Simply, it amounts to the splitting up of the three heaviest elements—uranium, protoactinium and thorium—into two lighter elements as a result of neutron impact. Subsequently, it was learned that the "fission" of thorium and uranium can be brought about by deuteron impact and by gamma rays. In other words, an element such as uranium can be turned into a different element by the subtraction or addition of a certain number of neutrons or protons.

By some such method lead could be turned into gold by the increase of atomic weight from 197.2 to 207.2. The philosopher's stone, at last—but at a terrible expense and expenditure of power.

The question whether the atomic energy set free by fission can be made available for mankind has yet to be solved. If and when this problem is answered, man will enter upon a new era of atomic power. Then the dreams of driving a super liner across the ocean and back on the energy contained in a lump of coal the size of a pea, and the hope of driving a space ship across the airless void, and thousands of other as yet unthought of exploits will become ordinary news items in your daily paper.

BLOOD BANK

Editor, SCIENCE QUESTION BOX:

What is the new typeless blood bank?—W.McG., New Bedford, Mass.

Doubtless you are thinking of the new method of removing the blood plasma from the blood, as blood banks are not new. The process of isolating the plasma has both advantages and disadvantages, the principal advantage being that this obviates the question of type of blood and can be stored more easily. In many cases where a direct blood transfusion without special need for the haemoglobin or blood cells is indicated, plasma can be mixed with a saline solution and injected on the spot.

The medical corps of several warring nations are experimenting with supplying plasma in ampoules for emergency use on the battlefield.

Several pharmaceutical firms have already undertaken to supply dried plasma which is less bulky than blood and in less danger of decomposition.

UNIVERSAL HEAT CONSTANT

Editor, SCIENCE QUESTION BOX:

As all forms of energy tend to become transformed into heat, will a time finally come when there will be a dead, immobile universe with one heat level?—D.C., Hongkong, China.

You propound a theoretical question the exact answer to which nobody knows at this time and which would require several pages to discuss. Briefly, the present tenable theory is that this is an expanding universe, expending heat and energy.

If, after eons, there is no change, there will certainly be a dead universe with a heat constant of 273 degrees below zero, or absolute zero, centigrade

However, Dr. Millikan has advanced the theory that matter—light—heat and energy being considered as forms of matter, goes through a pulsating cycle somewhere in the universe, re-issuing as vital energy in the form of the inexplainable cosmic rays. If this theory is tenable, it makes little difference whether we live in a contrasting or an expanding universe; the cycle would seem to be unending.

OIL SHORTAGE?

Editor, SCIENCE QUESTION BOX:

Is the United States in danger of an oil shortage?—H.G.L., Paterson, N. J.

Your query is possibly prompted by the East Coast gasoline and fuel oil rationing. This, as you may know, is due to the lack of facilities to handle oil shipments because of the diversion of oil tankers into war service. Scientifically, the answer is no. Our present recoverable supply of oil is about twenty billion barrels of petroleum.

On the average, an oil field stops producing when only a third of its oil is extracted. Various methods are being used—boosting by use of natural gas, increasing the porosity of oil sand, etc—to increase our recoverable reserves.

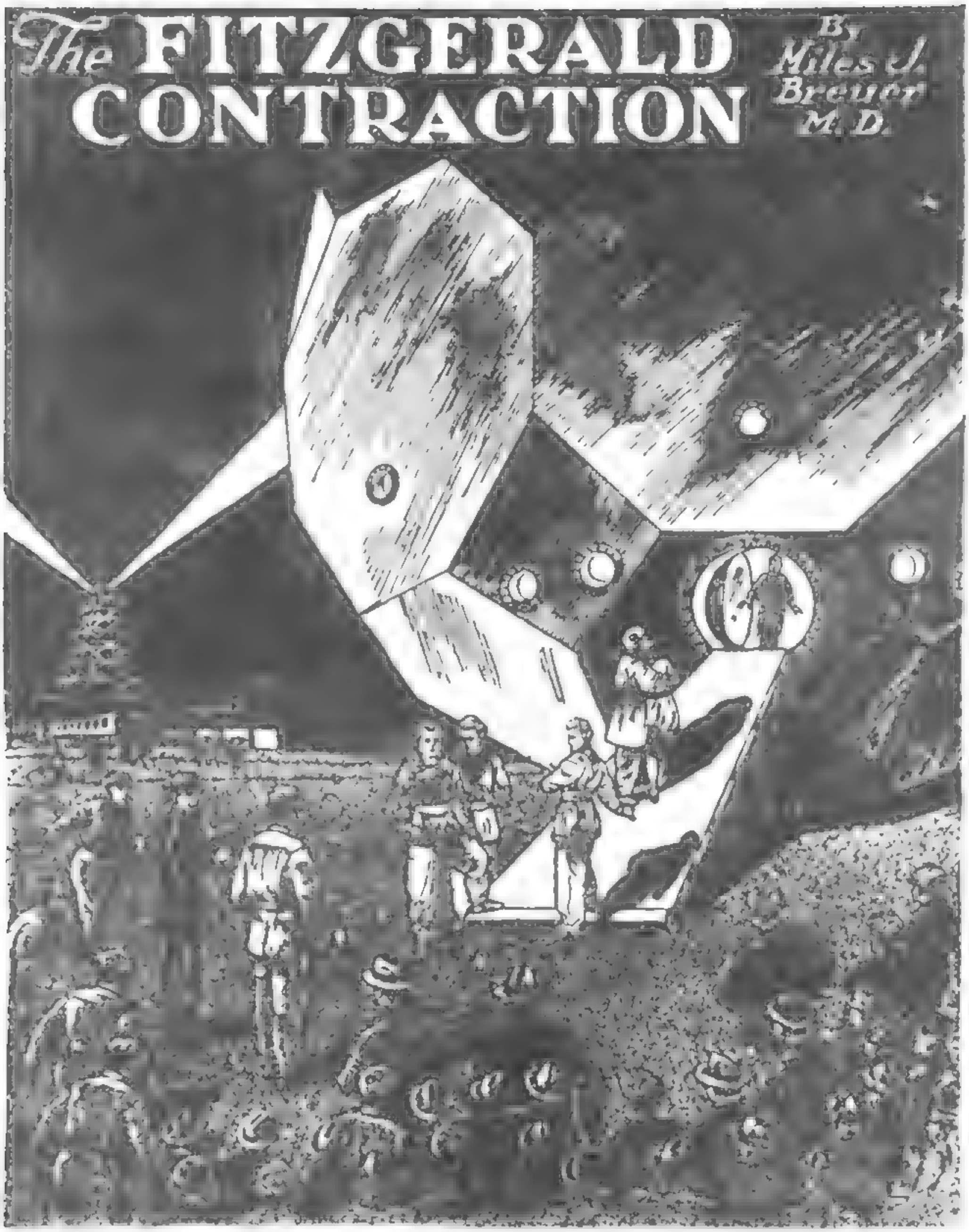
A new revolutionary method that will double our reserves is being tried. This is known as horizontal drilling.

Perfected by Leo Ranney, horizontal drilling has already proved successful in developing great quantities of water. If it works as well for oil, our recoverable oil reserves will amount to forty billion barrels, or enough to let us forget about gasless Sundays for a long time.

Address Your Questions to SCIENCE QUESTION BOX, STARTLING STORIES
10 East 40th Street, New York City

The FITZGERALD CONTRACTION

By Miles J. Breuer M. D.



I REMEMBER Wendelin's words vividly to this day. I had been trying my best to get him to come out to spend an evening in the society of young people. He sat with his head bent over a blue-covered book, and paid no attention to me. Suddenly he slammed the book face down on the table and wheeled around.

"You mean a man is in love, not with a particular girl but with a type?" he demanded.

I nodded.

"All these fellows who would die for the only girl in the world," I replied, "could die quite as devotedly for any other girl of her particular type. And yet a young fellow like you goes moping because three years ago your fiancee was killed in an unfortunate accident."

"You mean well, Bill," he said in a low voice. "You may possibly even be correct about your types. But not for me." He stopped a moment and looked at me gravely. *"There isn't a girl in this world that I could love!"*

I didn't pay any attention to that at

the time. It sounded like the same thing that any man would say under the circumstances. I kept on trying to persuade him to go out for the evening with me. It was only later that memory brought his words back to me.

Fate has a way of astonishing us with things which she has plainly prophesied to us long before. When the time came and Wendelin married a girl who was not of this world, nor even of this *time*, his words came back to me vividly. Just then, I was intent on getting him to sally forth with me.

Wendelin looked stolid, but he was clever. With his fair hair rumpled, the huge mountain of him slouched in his chair, he looked formidable physically, but certainly not intellectually. Yet here is what happened to me.

Realizing my determination to get him into feminine society, he quit arguing, gave me a generous slap on the shoulder.

"You're a good pal, Bill. You would like to see me as happy as you are. But I can't be happy that way. Just now, this stuff is more fascinating than the company of girls."

HIS words made me look dubiously at the blue-covered book.

"What do you make of this?" he asked.

"Hindu hieroglyphics, or Arabic hen tracks, or something. And some ugly stone gods." I seized the book and looked at its title.

"The 'Lost Continent of Mu'! What's that?"

"Something that mathematical physicists ought to know more about," he said, slyly. "This is an account by a Colonel James Churchward of some remarkable evidence he discovered in an ancient Hindu temple. On the basis of this evidence he spent several years among the islands of the Pacific and has accumulated a mass of data indicating that a continent once existed in the Pacific Ocean.

"The Continent of Mu—so ancient it makes Egypt, Babylon, and Assyria seem like sprouts of yesterday—had a population as great as ours today and a civilization that was probably more advanced than ours.

"Now recollect what geologists say about that part of the Pacific. The great depth of the ocean, the vast stretches of deep water without an island, the resemblance of the island volcanoes in the surrounding islands to similar structures on the Moon —what became of Mu and its civilization? Was it the fragment of the Earth that broke off to form the moon?"

"Interesting," I admitted, "but not enough to keep me from going to the Trianon with Wilma."

"The continent of *Mu*," he continued "was the real birthplace of the human race. Our present culture has descended to us from some fragment or colony of this civilization that somehow got across to Eurasia."

"But how do you reconcile dates?" I asked. "The Moon got loose between a quarter and a half million years ago. The human race has not existed that long."

"On the contrary, there are indications that the human race has existed that long. There is evidence among the findings of Pacific explorers that, at a time when we commonly think man was an ape-like brute, he was at least as highly civilized as we are now. Some of the ancient philosophy of India looks very similar to the Einstein stuff that you are so much concerned in teaching your students."

I stared at him incredulously.

"For instance," he went on, "in the theory of relativity you have some trouble with *identity*. Is a definite particle really the same all the time, or does it maintain position and attributes like a wave in the water? Tell me how that differs essentially from the Buddhist conception of all individuality being submerged in *Nirvana?*"

For a moment I puzzled over this idea. These fanciful discussions had not been uncommon between us, were doubly interesting because I was a theoretical scientist while his science was practical and applied. Probably for that reason his discussions were always wild fancy, while I strove to keep my feet on solid ground.

Then I got it. I looked hurriedly at my watch.

"You big crook!" I exclaimed. "I'll be late for my date with Wilma!"

He grinned. He had deliberately held me, killing time, until it was too late for

EDITOR'S NOTE

Some stories are forgotten almost as soon as they are printed. Others stand the test of time.

Because "The Fitzgerald Contraction," by Dr. Miles J. Breuer, has stood this test, it has been nominated for SCIENTIFICTION'S HALL OF FAME.

In each issue, for several forthcoming numbers, we will reprint one of the most outstanding fantasy classics of all time, as selected by our readers.

We hope in this way to bring a new prominence to the science fiction gems of yesterday and to perform a real service to the science fiction devotees of today and tomorrow.

him to get ready to go out. And some people thought he was dull!

"I'll get you tomorrow for this!" I told him as I left.

But I didn't. For "tomorrow" the bright body appeared, and the next day Wendelin found the photon-ship. Wendelin (not his real name) is the late superintendent of the Cicero Airport in Chicago, the man who found the photon-ship and was so sensationally involved with the strange people who came out of it.

THE "Lost Continent of Mu" lay neglected on a corner of the table as I opened my eyes and yawned. Wendelin was already up and dressed. This was natural, for he had been sound asleep the night before when I came in.

His tense, eager attitude as he bent over the morning paper meant something. What was up? He seldom took more than a casual interest in the daily newspapers.

"What's happened?" I inquired, jumping up.

I might have known that a couple of grunts would be all that I got. But he motioned for me to come and look for myself. Over his shoulder I saw the headlines.

STRANGE MASS DISCOVERED NEAR MOON, ASTRONOMERS PUZZLED

Bright, Swift Body Discovered Yesterday Afternoon

"Occasionally the newspapers print something that redeems the crime of their existence," he offered.

"Let's have it," I suggested, as I picked up my shaving-brush. He read it aloud.

"Professor MacQuern of Yerkes Observatory was the first to report yesterday at 7:10 P.M. the appearance of a bright body at one side of the moon. It showed in the telescopes as a small disc. The astronomers made no attempt to explain its nature. In reply to inquiries they state that it corresponds to no object known to science.

"Could it have arrived from interstellar space? Perhaps, but if so, it must have come at an unimaginable speed, a speed exceeding enormously that of any known celestial body. For, the night before, it was nowhere visible.

"Yet, tonight it is here, brighter than the moon itself. If it arrived from interstellar space in twenty-four hours, it must have come with a speed greater than any other body in the heavens."

"Impossible!" I exclaimed. "Matter cannot travel that fast."

"It must be true! The newspaper says so!" he said ironically and continued reading.

"By 8:30 P.M. the wandering spot had entered the moon's disc, against which it shone clearly as a much brighter area. By this time several of the larger observatories had calculated its diameter as something around two hundred feet, all agreeing to within a few yards. By 8:45 P.M. it was against the sky beyond the moon's further rim. Then it disappeared behind the rim.

"A sub-satellite! A moon of the moon! Though it arrived from space at a speed too great for astronomers to understand, the velocity of its progress about the moon is an admissible astronomical quantity.

"Perhaps then, it has not arrived from space. Perhaps it is a mass ejected from the moon itself. Perhaps some dying spasm of our decrepit satellite has shot it out volcanically. That would explain its extraordinary brightness.

"At 12:30 this morning reports came in of its reappearance at the edge of the moon where it originally appeared. Therein lies a mystery, for, traveling as a free satellite, it should have reappeared much sooner.

"The Associated Press has sought statements for all known observatories. Astronomers, however, decline to give out further information. Is the strange object so bizarre that they are unwilling to talk?

"From 12:30 until four o'clock this morning the body has been seen only once. It described a circle on the disc of the moon. Then it traveled to the center and remained there."

"ALL right," I said, when he stopped reading: "Now what is the thing? It's up to us to decide, isn't it?" I had recovered my equanimity and gone on with my shaving.

"I know you'd love an argument," Wendelin said. "But I've got to get to work. And so do you. It might be a fragment blown off the moon, or it might be a space vehicle from a distant planet."

"What!" I shouted. "Dreaming again? Wake up! It's morning."

"Don't get funny," he replied. "Why isn't it possible?"

"You're a darned good atmospheric aviator; and I take pleasure in paying you the compliment," I answered. "But flying through interstellar space is something different."

"Why isn't it possible?" he repeated.

"Possible, perhaps," I admitted. "But probable? The chances against its probability are the square of a million to one."

"Where do you get that million to one?" he demanded.

"I'll tell you, but I'll have to make it brief, for we've got to get to work. This is a subject that comes into the domain of my everyday teaching.

"The basis of life is protoplasm. Protoplasm exists within extremely narrow limits compared with the wide range of the universe. Heat, light, moisture, oxygen and gravitation must all be exactly right.

"One black-ball rejects. Three different experiments were made on this planet before intelligent being evolved—reptiles, birds, and mammals.

"Conditions necessary to support mammalian life do not prevail on any other planet. Mercury is too hot. Venus has one face to the sun, too hot and steamy—the other eternally cold. Mars is cold and dead. The rest of the planets are probably not yet solid.

"The Earth is unique in the solar system. And if our moon had not broken

away, forming the great cavity filled by the Pacific Ocean, the whole surface of the Earth might be covered with water. Then where would man be?

"Now, among the hundreds of millions of stars outside our solar system, is it rash to say that somewhere the same conditions exist? We cannot say that they do not exist, but they must be extremely rare, if they do exist.

"A solar system like ours is a rare freak. The density of stars in space is comparable to that of twenty billiard balls roaming the interior of the earth.

"Man, therefore, is a rare accident in the universe. His existence depends on a series of rare accidents, so that the chances against the repetition of the evolution of Man are expressed by the product of the chances against all the individual accidents. Therefore, the chances against last night's bright spot being a space vehicle from another planet are about one to ten raised to the twelfth power."

WENDELIN shrugged his shoulders. "Looks to me like a space ship," he said blandly.

I plunged into my work at the University and did not come up for air until eleven. Then I dashed across the street for a newspaper. I selected a Post as the most accurate. The story now covered two columns of the front page.

STRANGE BODY COMING NEARER

Late dispatches from nine observatories, report the celestial wanderer, discovered last night, is approaching Earth at a tremendous velocity. The wanderer has changed color. From yellowish-white to a faint but definite blue-violet tinge. This is to be expected, because of the apparent decrease in wave-length of the emitted light. It is called the Doppler effect.

As we go to press, it has doubled in brilliance. As its present rate of progress, the bright body will reach the earth before dawn tomorrow.

The writer did not neglect to make the most of his sensational opportunity. Where would it strike? What was it composed of? Would Omaha or Kansas City be the target? With fiendish realism the writer painted the havoc created when a huge meteor struck Siberia in 1914. The correspondent did suggest that it might be a space vehicle from a distant planet and presented arguments on both sides of that question.

For some reason, the reports gave me a strange thrill. It seemed unfair that for four hours of the afternoon I had to submerge myself in a sodden flood of routine work. But at five, like a diver emerging from a long underwater swim, I dashed eagerly out of the oppressive rooms.

A boy came tearing down the street with a huge bunch of newspapers. He was yelling as if he were in torment.

"*Daily News* Extry!" he blared, and went off into Siamese or Hottentot.

I seized a paper while he plunged on into the quadrangle to meet the press of emerging students and faculty members. The headlines screamed:

MOLTEN MASS HURTLING EARTHWARD!

The Daily News reporter at Boston interviewed Professor MacQuern at eleven this forenoon and was told that the spectrum of the space wanderer contained no Fraunhofer lines! This may not mean much to the average citizen, but was a knockout for the astronomers.

"Such a spectrum can come only from a solid, incandescent body," said the head of the Harvard observatory.

"The latest checks on the course of the bright body confirm previous statements. It is headed toward the central portion of the United States and is due to arrive shortly before dawn tomorrow."

There should have been a panic throughout the Mississippi Valley. One would have expected people to rush pell-mell from the threatened area. But no one did. No one knew whence to rush or whither. I did not feel much fear, and I doubt if anyone else did. The chances of its hitting me seemed small.

But I was eager to get a glimpse of it. The newspaper reports and a bulletin from the Yerkes Observatory stated that it would be visible to the naked eye about eleven P. M. Great crowds of us stood and watched and searched the heavens, but saw nothing. Surging crowds packed Madison Street around the newspaper offices, as they do on election nights. There were dispatches galore, but all said that the bright body had vanished.

In my own mind I could picture the thing, hurtling straight toward Earth, invisible. It might be invisible because in the terrific cold of space it had rapidly cooled, no longer gave off light. But it was still coming. I went home to bed.

In the morning, eager to know what had become of the bright body, I dashed out for my Tribune. But there was no news. There was a protesting-against-fate sort of editorial, marveling at the sudden disappearance of the object that had set the world agog. All searching telescopes had revealed nothing!

At noon I emerged from the oblivion of my classes, and as it was Saturday, I was through for the day. I hurried to a newsstand. But the pages of the Post contained no mention of it. I tried a Daily News and an American and, finding nothing, threw them down in disgust.

I reasoned that if it were going to fall at all, it would have struck by this time. Therefore, it must have struck off from Earth, or fallen into the ocean.

"Back to the old humdrum life, and to trying to get Wendelin interested in some girls," I thought, as I headed towards my room.

As I stepped into the apartment house, the telephone operator stopped me on my way past her desk.

"Mr. Wendelin telephoned asking if you would come to the field as soon as you got here. He seemed to be excited."

Snatching a hasty lunch, I was soon on the cars, bound for the Cicero airport. There, after some search I found Wendelin near the center of the vast field, staring toward the west.

"The last mail-ship has just left and I'm free till four thirty," he said as I came up. He seemed immensely pleased at my arrival. "I've been pretty busy, but my curiosity has been run ragged as to what that thing is."

He pointed to the south-west corner of the field.

I could see nothing worthy of note, and said so. He seized my arm and pointed.

"Look! Aren't the fence-posts brighter in that corner?"

They were. In spite of the daylight, they glowed.

"There's no light around here that could do that," Wendelin said. "I can't tell you where it comes from. Now look again. Do you see any fence just to the north of the corner? Or just a hazy effect?"

"There's a break in the fence," I said. "But one wouldn't notice it without looking closely."

"That fence was intact at ten o'clock this morning, and I've been out in this field all the time since and didn't see anything happen to it. Well, look some more. Just back of the break in the fence is the Ford Assembling Plant. Do you see it?"

"I do not!" I gasped, remembering that I had seen it there many times.

"Look at the ground just in front of the gap in the fence. That corner isn't used much. The watergrass and Russian thistle are as thick there as they are right here. Do you see them?"

"No!" I exclaimed. "It looks like the end of things. What's happened?"

"That's what I've been studying since I noticed it a couple of hours ago. I've come to the conclusion that there's something there. Something camouflaged or invisible. You can't see it, but you can see it's there."

I peered intently. He was right. A huge chunk of the ground and background was blocked off.

"What in the world!" I gasped. "How'd that thing get here?"

"What became of the bright body?" he asked in return.

"Come. Let's have a closer look at it!" I said.

The nearer we got to it, the more convinced we were that there was something there. What the mystery of its invisibility was we could not conjecture. We were both determined to go right up to it and see if we could feel anything with our hands.

"After we know more about this," Wendelin panted, "we'll find out that it's got something to do with the bright thing against the moon."

"Suppose," I offered, "that you are right? Suppose the thing really is a space machine? Why is it that you know about it before the rest of the world? Is it because you are endowed with some sort of mysterious prophetic powers?"

"Aw, cut the comedy, Bill. It's just because I've got some imagination, and have the nerve to conceive things that the rest of you are too hide-bound to admit."

His speech and our run were cut short by a terrific flash of light, so intense that we were instantly blinded. I stumbled to my knees. It felt as though we had suddenly run close to the sun itself.

It was minutes before I could open my burning eyes. All I could see were flashes and dancing lights. When I could see, I felt mild surprise to note (with my back turned to the place of mystery) that the field, the hangars and the buildings beyond the fence were all in order, just as they had always been.

THEN it dawned on me that the blaze was gone. At the same moment I perceived Wendelin was also turning around warily. Cautiously I turned to that south-west corner.

The whole end of the field was filled by a huge, blue-gray bulk, a vast polyhedron of metal with octagonal faces as big as the size of a house. In diameter it was a city block, possibly a little less.

The first glance disposed of any doubt as to its artificial origin. The straight, smooth edges of metal, the flat plates between them, the half-dozen windows, the huge bolt-studded door, all positively precluded the idea of its being an inorganic meteor.

Shouts behind us caused me to turn around. People were running toward us. In Chicago, no matter what happens, a crowd will collect in thirty seconds.

As I turned back to the huge polyhedron I gasped. The big door in the octagon next to the ground was opening. We weren't thirty yards away, with the dark bulk looming almost over our heads, and we could hear the great machinery. Out of the yellow-lighted circular opening slid a ramp that touched the ground. A group of people walked down the gangplank.

Wendelin and I plodded ahead, studying them. At first glance, we thought they were Chinese. Three of them wore soft, silken blouses of green with red, brown and black designs and loose, pajama-like trousers. The other two had nothing in common with Chinamen. They looked like Greek maidens, in beautiful silky tunics—one blue, one pink. Their legs were bare. All of them moved heavily, as though walking were a task.

Their faces were Caucasian in shape and color. They were noble-looking, like the ancient Greeks. If there was any marked feature, it was that their skins looked tanned, as though they had been in the sun a great deal.

When we were a dozen feet away from them, they stopped and looked at us. We stopped also.

They looked at us, at the people running behind us, at the field, the distant buildings.

They frowned and shook their heads as though they hadn't the least idea of what it was all about. They spoke a few short, breathless words to each other.

Then suddenly a little shriek came from among them. It came from the blue-tuniced young woman. Following the shriek there was a streak of silky blue, a flash of bare legs, and the next thing I knew, she had her arms about Wendelin's neck. She clung to him with all her might, buried her face in his shoulder, and softly crooned to him.

"Ahn-neeyaht! Mla Ahn-ee-yaht!"

Poor Wendelin! For a moment he stood

as if paralyzed, his arms stuck stiffly out at his sides. In his baggy white coveralls he looked huge and clumsy compared with the delicate pink-and-blue creature that clung to him.

Then the girl held him off at arm's length, as if to enjoy the sight of him. The joy in her face melted into confusion. She studied him as he stood there, dumb as a fire-plug, and her face changed from doubt to perplexity, then to horror.

She uttered another shriek and ran swiftly back to her own people. There she wept on the shoulder of one of the green-pajamaed men, one with gray locks and wrinkled brow.

"Mistook you for her friend," I ventured to Wendelin. But he stood as if in a daze.

By this time several of the approaching people had arrived. Most of them had seen what had happened, and they gazed at Wendelin with varying expressions. There was a gable of excited voices.

The silk-clad people from the machine huddled close together. The old man led the weeping girl back up the gangplank. As they disappeared within, I could see that he was trying to comfort her. Wendelin suddenly came to and barked sharply at one of the airport mechanics who had come running up.

"Telephone!" he ordered "And make it snappy. First, the police station. Get two squads of guards out here, pronto. Emergency. Second, the Chancellor's office at the University of Chicago. Have them locate Chancellor Burkett and ask him to get out here as quickly as possible!"

"Yes sir!" the man said and was on the run before Wendelin had finished talking.

The crowd gathered swiftly. Already the dense press behind us was crowding us closer to the silk-clad group. To the sides of us, the crowd pushed forward and surged against the huge machine, examining its walls, tapping and scratching them.

I WAS thoroughly disgusted with the behavior of the people. Here were guests from a distant, evidently highly-civilized planet, landed in what they supposed to be a civilized city of Earth. Instead of being courteously welcomed, they were about to be trampled by a herd of wild buffaloes.

The strangers shook their heads and seemed to be at a loss. Then they walked up the gangplank and disappeared within their vehicle. The gangplank slid inside, and the door clamped shut.

"Wasn't bad while it lasted," Wendelin laughed. His laugh sounded strained.

"You certainly showed presence of mind in sending for the police," I said. "This mob will tear that thing up from dumb curiosity if they're not held back."

Ten minutes later, two dozen policemen pushed toward us. The retreat of the strangers into their machine had removed the crowd's last inhibition, and we were being squeezed against the walls of the huge vehicle. The substance of which the walls were composed was cool, and felt like lead. The policemen formed a circle around the huge object and gradually cleared a space around it.

"I'm afraid the harm's already done," Wendelin said.

"I wouldn't blame them for picking up and leaving the solar system," I said. "In another ten minutes the crowd would have torn them and their machine apart for souvenirs."

We waited patiently for something to happen but the machine remained huge, silent, inscrutable. At 6:30 Chancellor Burkett arrived with Mayor Johnson.

"I called on you," Wendelin said to the chancellor, "because this is a situation for experts and specialists in various lines. You are the best man to find the right people quickly."

"Well, here's one of my experts right here," the Chancellor said, laying his hand on my arm.

We waited some more. It grew dark, and floodlights were turned loose upon the scene. Finally the gangplank slid out, and two of the men in green silk pajamas appeared. We hesitated until one of them beckoned us, then held up a hand with five fingers spread out.

"They want five of us," I suggested.

Wendelin and I, the mayor and the chancellor stepped forward. The chancellor motioned to the burly police sergeant, a good man to have along in case we needed physical assistance.

I led the way up the gangplank. We found ourselves in an empty room, lighted by a bright globe. One of the strangers, a brisk, bright looking man of about forty, laid his hand on my shoulder, then touched a button and plunged the room into darkness.

SOME of our group stirred and growled in suspicion. But in an instant the light was on again. Then my interlocutor pointed outdoors and again put the light out. He turned it on again promptly and drew a small telescope from his clothing. He looked intently upwards through it for a moment, then lowered it, pointed to the light globe. Again he pointed to the out doors and again put the light out.

"He wants us to put out the floodlights," I said. "The light interferes with their observation."

Wendelin sprang to the door to give the order. The man from the machine took both my hands and shook them formally. Then he led me to his companion, who did the same. This was repeated with all the members of our party.

"Sort of an introduction," I ventured. "I gather we're going to be friends."

When the lights were extinguished outdoors, we followed them through long corridors, up interminable metal stairways. Wendelin, who walked beside me, kept peering into all recesses and doors, but we saw nothing of the beautiful girl.

Finally we reached the top. Here in a large room was a beautiful eight-inch telescope. The room was a marvelous astrophysical laboratory. At the telescope sat a man calling out strange words; at a table sat two men, one manipulating some sort of calculating machine, another covering sheets of some sort of parchment with

figures. All of them had on their faces that look of blank, hopeless perplexity.

The symbols were utterly strange to me, but they were in orderly rows and columns. Then the calculation was finished, and the man with the papers announced the result. The others stood as if petrified.

It was several moments before they turned to us, resignation in their faces. The man who first interviewed me confronted me again. He pointed to himself with an up and down gesture indicating his whole body.

"Zo yot ur?" he said.

"Sounds like Sanskrit," the chancellor whispered.

I subsequently heard the same query many times. At the moment I wondered what he meant. So he took my hand and pointed to it, then to his hand, and repeated:

"Zo yot ur?"

Then he pointed to the telescope to the light globe, to the table.

"Zot yot ur?" he asked of each.

Finally the light broke.

"They've decided to stay and learn our language!" I exclaimed. "He's asking the names of these things!"

"We'll have one of the Education people down here tomorrow," the chancellor said. "Also a philology man to pick up their language."

"By the way they act," I said, "they seem to think they have come to the wrong place. But they've decided to stay anyhow and look into it."

"DO you think," asked the chancellor, of Professor Andrews, head of the School of Philology, "that we should learn their language or teach them ours?"

We were holding a conference in the chancellor's office. There were about a dozen of us from different departments of the university, and a representative from the mayor's office. All of us were anxious to show our visitors the utmost cordiality, but none the less we were eager to learn their story.

The chancellor's query answered itself later. Four of us were detailed to establish communication with our mystery-enshrouded visitors. We were to act as sort of *liaison* committee, with Dubuque of the Education Department as chairman. Andrews the philologist, Fielding the astronomer, and myself as members.

The next decision of the chancellor's conference was to attempt to persuade our visitors to move their machine to the Midway, just beside the campus. Most of us lived near the university and would have to make long and tedious trips to the Cicero flying field. We had no doubt that the machine could move itself with little trouble.

It worked out beautifully. Our committee visited them the next morning and were met by the same five people who had stepped out of the machine on the first occasion. I was selected as spokesman because the visitors already knew me. I sketched a map of southern Chicago, putting in the landing field with their vehicle in one corner. They nodded.

Then I sketched in the university, beside the broad Midway and indicated with gestures the connection between ourselves and the university buildings. Then it required but a simple gesture to indicate the move to the Midway.

We conducted them to an airplane and flew them over the Midway. They regarded our airplane with interest, but without admiration. Possibly it looked as primitive to them as a rickshaw looks to us.

The moving of the vehicle was a spectacular performance. The space-travelers closed their door, having motioned us away and warned us by placing their hands across their eyes.

"Look out for the light!" I warned. The police shouted their warning to the people in the vicinity, protecting their own eyes with their hands. With my eyes closed and covered, I was still conscious of the flash. When I looked again, the huge polyhedron was no longer there. I noted a vague area of emptiness that obstructed the view. But in a moment that thinned. and the fence was in plain view. When we arrived at the Midway, the machine was there.

WE FELT much encouraged. It looked like a good beginning. We were further encouraged when they invited us into their machine and took us on a tour of inspection.

The word photon-ship seems to have been most widely accepted as an appellation for their vehicle. The public knows all about the luxurious living quarters with carpets, wall-hangings, couches, books. pictures, the solarium, the gymnasium, the swimming-pool, the marvelous astrophysical laboratory, the solar motors, the huge electric generators and field-coils for transmuting elements.

But there were things about the photon-ship that impressed more than the engines. For instance, these people no matter what terrific speed their machine attained, must have been on their way at least a month. Yet no room that we saw showed traces of a month's wear.

The machinery was new, the food supply room was full. There was food there for thirty people for years it seemed. The people's clothing showed no signs of wear. The people themselves did not look fatigued as though from a long journey. Our gravity was more than they were accustomed to, yet they seemed to be rapidly adjusting themselves to it.

Altogether, it looked as though they had not been on their way very long. Could they be from our own solar system? All scientific knowledge prohibits such a possibility. The mystery became so keen that we used all sorts of artifices to learn where they came from. We did not succeed in making them understand our query until they had learned English.

Their method of learning was a high speed one. The five people whom we had

met on the first day were our direct pupils. Everything these five learned each day was common property among the rest of the thirty by the next day.

On the first day of instruction, the man who had taken the initiative with me, Addhu Puntreeahn, took a newspaper out of my pocket, asking permission with his eyes. He pointed to the first T in the title, The Chicago Tribune. I pronounced it for him. He nodded and noted it down in a little metal book.

I wrote out the alphabet for him, giving him the sounds, which he noted down by a wiggly-looking symbol of his own. He then tried to pronounce words out of the newspaper. The results were amusing, for there is no logical system about English pronounciation.

FINALLY it dawned on him that there was something wrong with our alphabet or with our pronunciation. He tore out his notes and spoke a few words to his companions. Then, in pantomime, he asked me to pronounce entire words, and made notes. I read a couple of columns, indicating each word with my finger. When this was done he read out of his notebook.

"Real estate interests pushing New York subway project," and "New Peace Agreement in the Orient," with excellent pronunciation though he did not know what the words meant. Obviously they had a highly perfected phonetic system of recording sounds.

On the morning of the second day, Addhu spoke.

"Today we speak more in words, less in signs."

He seemed pleased at my astonishment. He reproduced our Mid-Western accent faithfully, and he proceeded to ask me one question after another.

"You are on this earth. Everything you do, you do on the earth. What is the word for that?"

"You mean that I *live* on this earth?"

"Ah, yes. You are very intelligent indeed. You also live in this city? Is that correct? Then what is a place where you live?"

"My home?" I tried.

And so building up from known words to unknown, from concrete to abstract, from words to sentences, always noting in his book.

He acquired a vast store of our language, which in the evening the others would distribute among themselves.

Three weeks after they had come they were talking to us in English. They spoke slowly, but the English was correct and our understanding perfect.

"We can understand each other now," I said. "I cannot wait any longer to ask you from what planet you came to the Earth?"

"We came from the moon!"

Everyone in our party started in surprise.

"What moon? *Our* moon?" Fielding shrieked, as though in accusation.

The visitors all nodded.

"Ah, yes," I said. "We saw you stop at the moon. But from where did you come?"

"Only from the moon," Addhu said, wrinkling his brows.

"Your machine can travel faster and farther than that," I suggested.

"You are right. We did travel fast and far," Addhu replied.

"Where? Where?" asked several of our committee in unison.

"I do not yet know enough of your language to explain," he said.

"But," the chancellor urged, "there is no civilization on the moon capable of building a ship like yours."

"Alas, you are right. There is not." There was a strange break in Addhu's voice. "We shall try hard to learn the vocabulary of your sciences, so that we may explain to you as soon as possible."

One morning the young woman who had lavished the mistaken greeting on Wendelin spoke to me. She was the daughter of the expedition's commandant, and her name as near as I can manage it was Vayill Dhorgouravhad. She always wore blue, while the other young woman, who was the wife of one of the men, varied her costume. Vayill's hair was a blue-black, her eyes dark blue, whereas the other's were brown. Vayill was sad, the other was gay. But Vayill glowed with intelligence.

"Where is the gentleman who was with you the first day?" she asked, coloring a little. "I have not seen him since, and I should like to."

"Well, there won't be any trouble about that!" I exclaimed.

Wendelin jumped out of his chair when I told him. He laid out his newest suit, his most elegant combination of necktie, shirt and handkerchief.

"I never knew your former sweetheart," I said. "Was she quick and determined, and did she dress in blue a good deal?"

"Aw, go to blazes!" he growled, and refused to speak to me the rest of the way.

When the two young people met, they were constrained and hesitant. With a fine courage, the girl stepped forward.

"I want to tell you that I am sorry for my behavior on that first day," she began.

"Oh, not at all!" Wendelin stammered.

"I thought you were—" her voice broke a little.

"How do you like this Earth of ours?" Wendelin asked briskly in a matter-of-fact tone. I have said before that there is nothing the matter with his method of handling people though externally he appears stolid.

Before we left a woman from Marshall Field's was measuring Vayill for some light apparel. It was a highly delighted Vayill the next afternoon who, in unfamiliar high-heeled shoes, walked down the gangplank, and took her place beside Wendelin in his yellow roadster.

The rest of the visitors also got rides and clothes. I spent an afternoon driving around Addhu and Drahnápa Dhorgouravhad, the old commandant.

"What do you think of the city?" I asked as I brought them back.

"I hardly know what to say," the old man pondered. They were now speaking

English fluently. "It is interesting, certainly. But what a haphazard scramble."

On the thirtieth day after their arrival, Addhu, who seemed to be adjutant, announced that they were ready to tell their story. They suggested that we invite about fifty of our scientific men to some lecture-room where there were blackboards, charts, globes and other necessities.

His story follows:

WE HAVE a common origin and a common ancestry with you. Because of a most unusual occurrence, which, however, is quite in accord with well-known principles of Nature, you are vastly further removed from these ancestors than we are. We resemble them accurately. They looked exactly like us.

To show you our common birthplace, I shall use this globe representing Earth. Your ancestors and mine lived on a continent about the size of this one called Australia, north east of Australia in about the middle of this ocean, the Pacific. The Earth, as our ancestors knew it, was mostly water. There was a large fertile island in what is now the middle of Asia. And then there was the continent of Mo, where our ancestors lived.

A hundred years before the great catastrophe, our ancestors predicted it. The regular coincidence of the solar tides and of the natural free period of vibration of the Earth created an immense stress right in the region of the only inhabited and inhabitable portion of the globe. The people of Mo colonized the large northern island of Hin and prepared to endure the sudden shocks and atmospheric changes that they expected.

We had perfect records of this period. Our ancestors took infinite pains to safeguard them against destruction. Reading these accounts sends cold shivers through one's body. Winds, waters, earthquakes and electrical phenomena all broke loose at once and created an abysmal chaos.

Only in chambers hundreds of feet down in solid rock, prepared generations in advance, was it possible to live at all. The whole continent heaved and quaked. People were intensely ill most of the time, suffering for lack of air, and, after some days, only partly conscious.

Finally, they awoke to perfect peace and quiet, a strange physical lightness, a tightness across the chest and a difficulty in breathing.

Those who made their way slowly out of the burrows, over countless prostrate bodies and out into the open air, saw the oddly foreshortened horizon, the majestic, brilliant sphere filling a vast portion of the darkened sky. They realized that the expected had happened.

The land of Mo had broken from Mother Earth and was now spinning around her as a satellite.

Forever separated from their native planet, which floated in the sky with strange new continents visible on it, they were now inhabitants of the Moon, a new institution in the solar system.

At first our salvaged fragment of civilization had a difficult time. Yet the people of Mo were better off than the two terrestrial settlements. Their telescopes showed them that the island of Hin was now the center of a vast continent, but that it had been swept by huge tidal waves and its civilization destroyed. Through the centuries, they observed the region of Hin, eventually learned that men lived there. But their numbers were pitifully few, and they had been cast back into savagery of the most primitive kind.

The progress made by our civilization on the moon was very swift. Knowledge, intelligence, skill and technology advanced more rapidly than they had ever grown in Earth civilization, before or since. There was a reason for this—the stimulus of necessity. We knew that the period of habitability of the Moon was limited.

A thousand years after the birth of the Moon, when we space travelers were living there, conditions had already become less comfortable. The cold was objectionable and breathing was difficult. Our normal respiratory rate was forty, our normal pulse rate one hundred and twenty. Naturally, our eyes were turned toward the Earth. There was plenty of land there and only a few tribes of the most primitive kinds of savages. It was a wonderful opportunity if we could only get there somehow.

In respect to mechanical progress we had not reached the stage you have attained now. You are ahead of us in transportation, in flying in the air and digging in the ground, in making vast quantities of machines and other articles. But in scientific thought we had outdistanced you considerably.

It is still a little difficult for you to comprehend time, but it is gradually dawning on you that time is not an absolute entity. You are making encouraging progress in the understanding of space. You are beginning to see that space cannot be adequately understood on the basis of elementary geometry that it is curved in the neighborhood of material particles and flat only at an infinite distance from matter.

Of course space was of vital interest to us. So we had thoroughly developed ideas of space which you are just beginning to grasp. We were familiar with the Universe as the curved three-dimensional surface of a four-dimensional sphere. We live in and comprehend only the three dimensions of the surface.

THIS brings us down to the work of my own group, which is now in your midst. We conceived the idea of circumnavigating the universe and carried it out. That ought to be quite clear from the two dimensional analogy of circumnavigating the surface of the Earth, by going ahead continually in a straight line.

The material problems were solved by six men of our group. Their work gave us the means of travel from the Moon to the Earth—our long-sought goal. This part of the problem was turned over to other workers. We went on with the pure

science. Whether the others ever succeeded in getting to the Earth or not, we have never learned.

Two of our group were mathematicians, who worked out the equations for the relationship between *electrons* (or matter corpuscles) and *photons* (or light corpuscles). Four others were physicists, who confirmed the mathematical hypothesis experimentally.

They built up a series of "elements" out of photons, with a periodic system, analogous to that of the chemical elements. So far, they had produced sixty-seven light-elements, and marvelous substances some of them are. At the lower end of the periodic system they are not visible at all —at the upper they are quite too bright for human eyes.

Substances were evolved that could float on a light wave and were used for building our ship to circumnavigate the universe. A light wave is not, as many of your scientists still seem to think, a beam of corpuscles traveling in one direction. The only thing that travels in a constant direction, is the front or peak of the level of energy, just as a wave in water moves forward, though the particles of water move merely up and down.

It was the most brilliant and courageous project that the human brain had ever conceived. The tremendously discouraging feature of it was that even at the speed of light it would take one hundred million years to make the trip. We got around that difficulty in two ways. The first was to select a "high latitude" for the trip and thus shorten it—just as it is shorter around the Earth on the Arctic Circle than at the Equator.

The second was to go in a ship large enough and with a group numerous enough to be self sufficient. Several generations would live and die in our ship before it came back.

IT TOOK one hundred years to build the ship and perfect our plans. The ship you have seen. One important item of the equipment we did not show you—the automatic signal to give warning when the ship got back to the solar system.

Telescopic images of the constellations operate a grid-glow tube when just the proper configuration occurs, and to check it and make it doubly certain, an image of the solar spectrum operates another grid-glow tube. The grid-glow tubes sound bells and turn on lights. Once set, the apparatus requires no further attention, and remains on guard for hundreds of years. We could picture what a happy day it would be for our descendants when the bells began to ring, and the lights went on. The ship could then come to an automatic stop by means of the transmutation apparatus.

By far the largest portion of the machinery that you saw is needed, not for propelling the ship, but for transmuting the electron-elements and photon elements back and forth, one into the other. This transmutation is an intricate, in many respects a clumsy affair, and is accomplished by completely rearranging the equilibrium between electrons and protons on the one hand and photons and protons on the other hand. You have seen the brilliant and bizarre effects that occur when we operate these transmutations.

All of us in the ship are married couples, except the commandant who is a widower and his daughter. Poor Vayill! The start of our ship from the moon, a festive occasion for our whole race, was a tragedy to her. On the day before the start she was to be married to a young engineer—who was the perfect physical counterpart of your airman yonder, Mr. Wendelin. But on that day he fell ill of a cosmic ray burn, so frequent and so fatal among our moon people. Of course he had to be left behind.

Vayill had to make a quick decision. The start of the ship could not be delayed for one or two people. She shut herself up with her lover for an hour. Then she came into the ship and announced that she was ready to go.

The next day we closed and sealed the door and threw the switches. The motors hummed. We looked out of our windows, but we could see nothing. On all sides of us was a gray emptiness.

We had expected to go rapidly past wonderful constellations and had hoped that the sight of them would be a recompense for the deadly monotony of the trip. We discussed one or two possible causes of the phenomenon. We spent fifteen minutes at the window, and then we walked into the general living room.

Several days passed.

Then, suddenly, one day the gongs clanged! The whole ship was filled with their ringing, and in each room and corridor the signal lights blazed out.

"The *signal!*" we gasped, one and all. "Something has gone wrong!"

At least the automatic machinery had done its duty. The ship had stopped (relatively speaking, of course). We could see the stars out of the window. And we were chagrined that the machinery had proved untrustworthy.

Eagerly, however, we looked out to see where we were, how far the first jump had gotten us.

THE signal had worked correctly! Only a few hasty observations were needed to identify the sun, several of the familiar planets, the Earth and our home the Moon. Then we saw our observer turn pale.

I was the first one to push him aside and look. Eagerly I put my eye to the telescope to get a glimpse of home. My blood froze to ice! What was that I saw? A cold, frozen, lifeless Moon!

Doubtless your telescopes watched us approach the little world where we had lived, where we had left all our people and the civilization dear to us. You saw us circle around, but you cannot imagine the chill horror in our hearts as we gazed upon that bleak lifeless picture. How any of us preserved our sanity, I do not know. It is a wonder that a ball filled with gib-

bering lunatics did not descend to this Earth.

Then we looked toward the Earth and located the new lands that had appeared out of the waters, the countless cities, the numerous evidences, of an advanced and teeming civilization that had sprung up and again our senses reeled. What should we do?

There was only one answer. The Moon was dead. On the Earth were civilized people. We could not endure the suspense of remaining in space any longer. We selected a portion of Earth that seemed to be the most progressive and developed, chose the largest of its cities and looked for a landing spot.

To see your spreading civilization was a shock. To see yourselves, your faces, your resemblance to us was enough to daze us completely. Is it any wonder that poor Vayill was confused and thought Mr. Wendelin was her fiance? We were too puzzled, too confused to know what to do. To gain time, we sought refuge in our ship.

We decided to wait until evening and check up on the constellations. Our calculations showed us that radical changes had taken place in the configurations of the stars since we had last observed them, and that these changes must have required not less than two hundred thousand years of time!

THERE was an expression of amazement on the face of Chancellor Burkett as Addhu paused.

"But I do not understand," he said. "How long—I got the impression that you were in the proton-ship as you call it, only a few days altogether."

"Our voyage lasted three days and a half by our watches," Addhu said. There was a queer smile on his face.

"Well, then," broke in Fahrenbruch, the psychologist, "what is this about two hundred thousand years? How do you put that together?"

Addhu made as if to speak again, when the chancellor turned toward me.

"You look as if this meant something to you," he said to me. "Tell me what kind of a hoax it is?"

In truth, a light had suddenly dawned on me. Across the aisle old Fielding, the astronomer, smiled. He also understood.

"The *Fitzgerald Contraction!*" Fielding and I exclaimed in the same breath.

Addhu beamed.

"Your scientists are very clever," he said to the audience as a whole. "Quite promptly they have surmised what happened."

"Utter impossibility!" Chancellor Burkett said impatiently. He had a good scientific head on him, but was not posted on modern mathematical physics.

"I can explain it all, sir," I volunteered.

He looked at me skeptically.

"It is quite in accordance with a well-known natural law," I said. "It is, in fact, an experimental verification of a theory that has become fairly familiar in these days of Relativity."

The Chancellor nodded to indicate that he was listening. Others craned their necks. I assumed my best lecture room air.

"The fact that the voyagers felt that they had been on the way only three and a half days, whereas, two hundred thousand years had elapsed while they were absent from this region is perfectly explained by Fitzgerald's hypothesis of the contraction of a moving body. This hypothesis states that a moving body is shortened in the direction of its motion.

"The original experimental evidence that put our scientists on the track of this hypothesis was obtained in the famous experiment of Michelson and Morley as far back as 1887, in which they attempted to determine ether-drift. The contraction explanation of the phenomena as observed, was proposed by Fitzgerald and rendered plausible by the researches of Larmor and Lorentz.

"All the attributes of the moving body are decreased or contracted by the amount indicated in the formula. Thus, if a clock were travelling at the velocity of one hundred sixty thousand miles per second, its diameter to us will be reduced to one-half of its original diameter, and its hands to us will move at one-half their former rate.

If a man moves at that velocity, his breathing, his heartbeat, his perception of objects not in motion, and of time, will be reduced one-half. But he cannot see his own shortening, for his retina is shortened by one-half and he looks natural to himself.

"At ordinary velocities, the contraction is too minute to be detectable by experimental means. But at velocities like those of the celestial bodies, the effect is quite apparent. At the velocity attained by our guests, which was but slightly less than that of light, the effect must have been tremendous. Their length, the length of the photon ship and of everything in it, must have been almost zero in the direction of their travel.

"They must have been a thin flat wafer, invisible to ordinary observation. But they did not know it. Their measuring scales and rulers were all reduced by the same amount and still measured true. The retinae of their eyes, the tactile nerve endings in their fingers, were all equally contracted, and saw and felt everything the same as before. There was no way of detecting the change. To them everything looked natural.

"LIKEWISE while their chronology had decreased to almost zero. They detected no change, because the rate of their clocks and watches was slowed down the same amount. All of their physical activities slowed down similarly, consequently they lived at so slow a rate that three and a half of their days were equivalent to two hundred thousand of our years.

"They must have reached the limit of our own galaxy, turned around because of some unknown forces and returned to the solar system.

"Their high velocity is the sole explanation of why, during a period of relatively

few days to them, their entire race became extinct, the Moon on which they had lived became dead and cold—while on Earth continents were built, and new races sprang up and became civilized.

"But they are to be envied their experience. They are all the richer for it, and with a little adjustment will be perfectly well off in our world. They have been welcomed among us and will all find their places and become valuable members of the social order. In fact, in this country, if they do not mind a little blatant publicity, they can become wealthy as well as famous overnight."

There was a smile on the face of the chancellor and several of the others. The chancellor rose to speak.

Suddenly there was a commotion of heavy, hurried steps out in the corridor. The next moment there burst into the room the police sergeant who was in charge of the guards around the photon-ship. His sun-tanned face was a study in breathless astonishment, as he sought out the Chancellor and handed him a white envelope.

"Did you see it?" he gasped. "Nearly made me blind. Can't see good yet. And when I could open my eyes, the thing was gone! And this flopped down on the ground in front of us."

The chancellor was handing the letter to me, I noted through my daze. My name was scrawled on it in Wendelin's huge hand. With a quick, alarmed glance, I searched the room. Wendelin was not in the room. Nor was Vayill! I tore the letter open, with all eyes upon me.

"Good-bye, Bill," it read. "Vayill and I have just been married. Vayill says she hasn't got the patience to live here. She wants to sail again, to taste adventure. A girl after my own heart. I'm going along. She says I'll never see you again. I don't know. That's why I'm telling you good-bye. Six of her people—the ones who refused to dress up in our kind of clothes are going with us. Wendelin."

Wilma became ecstatic when I told her about it.

"Some honeymoon!" she exclaimed.

Copyright, 1930, Stellar Publishing Corporation

Coming in the Next Issue

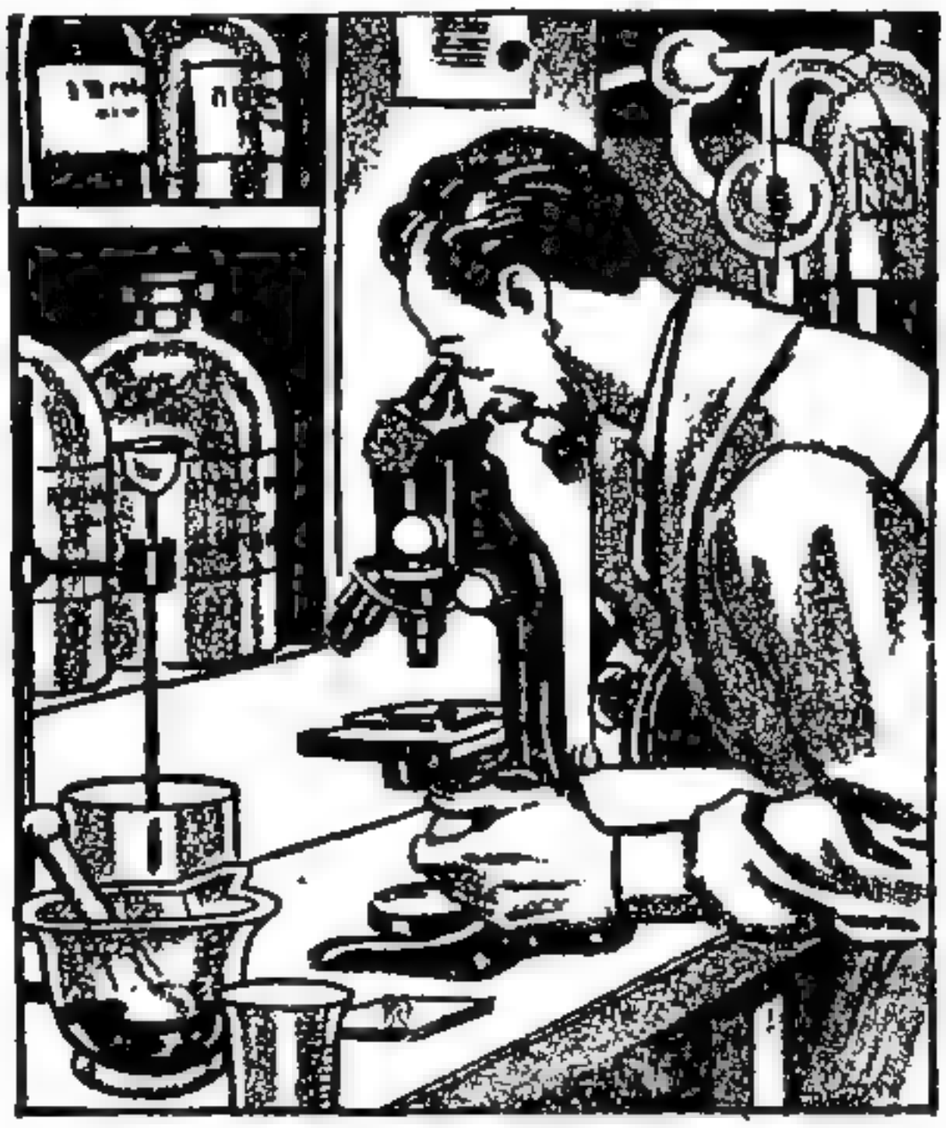
•

A Foe of Tyranny Finds Weird New Allies on the Surface of the Moon in

TARNISHED UTOPIA

A Complete Book-Length Novel

By MALCOLM JAMESON



•

Interplanetary Battle Rages in

HORNETS OF SPACE

A Hall of Fame Classic by R. F. STARZL

•

PLUS MANY OTHER STORIES AND FEATURES

Gears for Nemesis

By RAYMOND Z. GALLUN

Author of "Saturn's Ringmaster," "Dark Sun," etc.

St. Claire glared at Evelyn and Knobs as they removed their vacuum armor

There Was One Way to Save the Day for the Passengers of the Trail Blazer—and That Was to Give Them Both Day and Night!

COMMANDER Ned Kilmer was the man who discovered the sabotage of the atomic generators. Irreplaceable vital parts had been carefully removed, there in the ship's deserted engine-room.

"Good Lord!" the old leader gasped, realizing all too vividly what the results of this disabling of the machinery would be. "Who would do a thing like this?"

Without power from the atomic generators, the intricate propulsive mechanisms of the interstellar craft, *Trail Blazer*, could not operate, even though, ordinarily, they could hurl the star cruiser across the hyper-dimensional shortcuts of space, traversing light-years of distance in months' time.

And without power, the heating system of the ship was useless, too.

Which was unfortunate, for the *Trail Blazer* was grounded among the impassable, frozen-air mountains of the eternally dark and unthinkably cold hemisphere of Nemesis, single small planet of the dwarf star, Olympia!

Rugged Commander Kilmer knew that the Survey Group aboard the ship — some fifty people in all — who had been investigating the fabulous mineral riches in the grottoes of Nemesis, were doomed to die. They would meet a slow, freezing death on the night-half of a world that rotated on its axis only once, every time it revolved around its dwarf star primary. A contrasting hell-world, it was—its sunward face a searing inferno of heat and eternal daylight, its dark side congealed and timeless, and almost equally deadly.

The Group had plenty of food to last through the months, until a rescue ship could come from Earth. But with warmth seeping through the insulation of their ship, and no way of replacing the loss effectively, they would all be icy corpses soon.

"Either there's a crazy man among us," Kilmer thought anguishedly, "or an exceptionally clever crook, who wants to grab the mines—the mineral treasures of Nemesis—for himself. Jandrium, dorsium, and a half-dozen other commercially important elements, above uranium in atomic number, which can't be obtained on Earth."

Kilmer decided to announce his discovery of the sabotage to the other members of the Survey Group. He pressed a signal button on the gleaming duralumin wall of the engine-room. This was his last act.

There was the slither of a boot on the greasy engine-room floor. A shadow-blurred shape arose from behind the flanged bulk of a transformer. The gleaming illuminator-bulbs on the ceiling, efficient, and drawing the little power they needed from efficient storage batteries, seemed to watch sardonically.

In a moment of time there was a hiss, a puff of sparks, a short gasp, and a soft thumping. . . .

Not more than a minute afterward, the personnel of the *Trail Blazer* were gathering, pale-faced and strained, around the remains of their chief. His head and shoulders and legs were still perfectly intact, while his torso and lower arms were gone—burned to fluffy ashes that floated like loose feathers in the slightly drafty air of the engine-room. And there was a pungent, singed smell. . . .

"Rayed," Dr. Welden, physician of the Survey Group said briefly, his plump face taut. "I guess that makes you our boss, now, Mr. St. Claire, since you were second in command. You're our best scientist, now."

Arnold St. Claire's dark, effeminate features did not change.

By now most of the members of the Survey Group had recovered sufficiently from the stunning shock of their beloved leader's ghastly murder to discover that the atomic generators had been sabotaged, their vitals stolen.

No one really needed to say a word, then. It was starkly clear to those hard spacemen that circumstance spelled doom. Creeping death from cold, far, far from home, and in an utterly alien environment.

And it was equally plain to them that there was somebody among their number who was guilty, as yet unsuspected.

"My God!" a big bulking man named Peters choked thickly, brushing a muscular, oil-smeared arm across his forehead in a confused gesture. But the others were still too dazed to speak.

PERHAPS a half hour later, a slender young man with a crooked and singularly sinister grin pulling his lips perpetually to one side, entered the *Trail Blazer's* office.

He approached Arnold St. Claire, the new commander of the Survey Group, sitting there behind his desk.

"Mr. St. Claire," he said almost timidly. "I hope you'll forgive me for busting in on you like this. But maybe we won't have to freeze after all. There's a way to save us, I think. If you'll give me all the radite explosive on the ship, I'll do the rest."

St. Claire looked startled for a second.

"That would be an extraordinary request for anyone to make—just at present!" he burst out at last. "Both radite and undiscovered criminals are dangerous! Together, they're sure poison. Trust you with our stock of explosive? Not on your life, Mr. Knobs Hartley! One look at that face of yours is enough to tell me that you'd be glad to sell your own brother to the Venusian cannibals for a chew of karab gum!"

Knobs Hartley, one of the *Trail Blazer's* mechanics, had nice eyes, wavy hair, an innocuously slight build, and a habit of exercising with a pair of dumb-bells when nobody was around. But there was one thing bad about his appearance.

Five years in the endless interstellar distances, helping to expand the gigantic colonial empire of Earth, had not been without its mishaps for young Hartley. Once a flying fragment of steel, from a minor atomic generator blow-out, had severed a tendon in his neck. Hasty emergency surgery had saved him, but at the cost of shortening the tendon. Thus Knobs Hartley's mouth was pulled into a constant, one-sided leer, evil to say the least, though acquired in line of duty.

He struggled now, rather ineffectually, to straighten out his grin. He felt hurt, and regretted that he'd never taken time to go to the medicos to have his face fixed up. But he was determined to be tactful.

"I know you've got to be mighty careful, Mr. St. Claire," he said seriously, "until we find our saboteur and murderer. But I really have got an idea to save our lives, and I hope you'll listen. With that radite explosive I think I can speed up Nemesis' rotation on its axis a little—give both hemispheres a night and day period again! We couldn't freeze with a lot of heat and light from Olympia, the dwarf star, flooding this side of the planet half of the time!"

Knobs paused to get his breath; but Arnold St. Claire arched his lady-like brows in derisive startlement.

"What in the name of sense are you talking about, Hartley?" he roared. "Of course planets have been speeded up on their axes before, giving them a twenty-four hour Earth-day for colonial purposes. Mercury, in our own Solar System, was one of these planets, originally keeping the same face turned toward the Sun, just as Nemesis does with Olympia. But such speed-ups have only been accomplished at terrific cost, by means of gigantic drive-units, like those used to propel space ships. What could you do with the fifty pounds, Earth-weight, of radite, that we have in stock—tremendous atomic explosive though it certainly is? Nemesis is three thousand miles in diameter. Turning it any faster than it does normally, would take *real* power!"

"BUT we've got the power!" Knobs urged eagerly. "Not in the radite, but in something else. The trick I'm thinking of was known in every college physics lab, even in the Eighteenth Century, a thousand years ago. The facts about Nemesis will cooperate nicely with my scheme. First, it rotates on its axis once in about seven Earth-days — the same time that it takes to revolve in its orbit around the dwarf star, Olympia, which is very near, hardly bigger than the Earth, but very heavy. Second, we're stranded here close to the equator of Nemesis. Third, this is a porous world, as we've discovered both by actual exploration and radio-beam soundings. Nemesis is full of cooled volcanic caverns, almost to its core.

"Explosives, properly placed, would make some of those caverns collapse. The heavy rocks of their floors and roofs would fall toward the center of this world. That in itself will make Nemesis turn a little more rapidly on its axis! Thus it will catch up with itself in its rotation, and the dark hemisphere here will move around toward Olympia!"

For a moment St. Claire looked puzzled and quizzical. Then his expression changed slowly, and a Satanic gleam came into his deep-set eyes. He seemed to have made a decision.

"Knobs," he said finally. "You're a marvel. And I thought *I* was a scientist! But I'm fairly sure I'm still sane, at least. You blow up some of

the caverns, and — presto — immediately this planet begins to turn faster. Just like that, eh?"

St. Claire moved a tiny call-lever on his desk. A moment later a broad, burly man who didn't look too bright appeared at the doorway, an ugly ray pistol dangling at his belt.

"Ellis," St. Claire said distastefully. "Take Knobs Hartley here, and lock him up in the brig. It is evident that some screwball, with really malicious intentions, has already been very busy here in the *Trail Blazer*. So perhaps you can grasp my implication. I think we've got our man!"

Ellis looked dully surprised for a moment; but in addition to his ordinary good-nature, he had a childish respect for the will of his superiors. So he nodded like a good stooge and grasped Knobs' slight shoulders none too gently.

"Aren't you being a little abrupt in your judgment of Knobs?" someone questioned mildly. "All of us on this ship are in a terrible position, of course. But Knobs seems so perfectly honest and sincere—"

It was a girl's voice, speaking from the small Records and Data Room, which opened into the *Trail Blazer's* office. Evelyn Farnway, secretary of the Survey Group, was a friendly, unobtrusive little lady, with about the kindest eyes and prettiest teeth that Knobs had ever seen.

But this, sadly, was only a wistful observation, from a distance. Though companionable, the girl had kept a faint wall of reserve with everyone in the Expedition. And besides, what could a beautiful girl like her find to admire in a skinny little runt like himself—not even mentioning that everlasting gargoyle-grin of his?

"You'll please keep out of this matter, Evelyn," St. Claire advised in an annoyed tone. "Hartley may seem sincere, but maniacs are often good actors. Now that I've heard his crazy scheme about blowing up the grottoes of Nemesis, supposedly to make the latter rotate faster, and bring warming daylight to the dark hemisphere once more, I'm sure he's truly insane. The disabling of the atomic generators and the murder of Commander Kilmer begin to look more and more like the work of a deranged mind rather than the products of an intelligent criminal plan. Take him away, Ellis!"

So, within a scant minute, Knobs was sitting on the metal bench of the brig, staring at the securely locked door, pondering very hard.

ALREADY it was getting slightly colder in the little prison. The tiny circular window was partly filmed with frost. And through the unfrosted portion, the stars shone frigidly in a black, alien sky—here on the night-half of a world called Nemesis! Soon, as more heat leaked from the *Trail Blazer's* hull, the crew would be draining the storage batteries of their energy, to feed the heaters for a little while, and keep warm. But this would only delay the finish!

Knobs heard scraps of conversation drifting down the corridors from men he knew: "Poor devil—Hartley. Went off the deep end, huh?" . . . "But why did he have to doom us too—stripping the generators so we can't keep the heaters going?" . . . "I'd kill him if he was sane." . . .

Listening to comments like this, and feeling the stark promise of the increasing cold, seemed to sharpen Knobs Hartley's by-no-means dull wits. His natural suspicions began to increase.

The story of his supposed insanity had spread faster than it should have. St. Claire, the respected scientist, had evidently speeded up the propaganda against him. This looked definitely suspicious in itself. A lunatic who didn't know what he was doing, always made a good blind—a cover-up—a means of allaying doubts, and stopping a search for a real menace. A crook could blame almost anything on a madman, and go scot-free, himself!

"The dirty bum—St. Claire!" Knobs thought with swift, furious insight. "He knows perfectly well I'm not crazy! I didn't say a thing in the office, there, that a scientist with his knowledge wouldn't listen to to the end! He's used to the engineering wonders of the Twenty-Ninth Cen-

tury, though they're still a little unbelievable, sometimes, to the layman. He couldn't have thought my idea so terribly wild. At least the part of it he gave me time to tell him!"

Knobs had already reached the conclusion that Arnold St. Claire was the real saboteur and murderer. This belief was startling, at first—considering the scientist's honored position in the fields of research. But when you studied the situation more closely, the accusing facts fell together with amazing ease.

First, the motive. It was simple to guess what any criminal would want on Nemesis—personal control of the stupendous mineral treasures that the Survey Group had uncovered in the grottoes. With the Expedition, which was financed by the Earth-Government, a lost, frozen failure in the depths of interstellar space—its exploration data unfiled in the home colonial offices—a private individual could come later to Nemesis, and claim the mines completely as his own. That was Universe Law.

The government-backed Group, conducting a survey for later, wide-open colonization by small, competitive companies, would only be a vanished legend, then. And a crushing, greedy, one-man monopoly could move in, controlling a vast supply of important industrial resources. Fabulous riches, it meant—for somebody.

That Arnold St. Claire was inspired by such a motive, and that he was working toward its fulfilment, Knobs had scant doubt.

First of all, the death of Ned Kilmer had given St. Claire the dangerous advantage of command over the Survey Group. He was the one who benefited. Secondly, remembering the smooth scientist's original high post in the Expedition, it would have been easy for him to get the keys to the engine-room, so that he could go there even during a sleep period, and disable the generators. Whereas, for a lesser individual, this would have been difficult indeed to accomplish.

The space ship mechanic's conviction of the scientist's guilt was all but clinched by St. Claire's obvious effort to pin the blame for everything on him. Of course it looked at first as though St. Claire would not destroy the Survey Group—remove the obstacle it represented to his intention of seizing the treasures of Nemesis for himself—without his being frozen with the others. But certainly he would have arranged loopholes of escape to save his own skin! Nor was it so hard to see what those loopholes were!

THE vital parts of the atomic generators had been removed carefully. A real saboteur would have found it simpler to damage them beyond repair in their original position, without having to remove the mechanisms.

So St. Claire must have hidden those vitals somewhere, probably outside of the ship, where there would be no chance of anyone else finding them. It would have been easy for him to have hidden an extra supply of batteries, too, to enable him to keep warm in a space suit for a little longer than could the others.

When his co-workers of the Group had been disposed of, he could reassemble the atomic generators, fly the *Trail Blazer* to some nearby colonial world, concoct a story of disaster to explain the disappearance of his comrades, renounce his connections as a government explorer, and come back to Nemesis after a short time to grab the fabulous jandrium and dorsium mines privately. Suspicions, then, would be hard to prove, in the tremendous reaches of the star-deserts.

Yes, it was quite easy to understand the scientist's motives. But Knobs felt bitter and helpless. He had a plan that might not only save the lives of his fellows, but might put the riches of Nemesis into the hands of liberal, competitive industry and colonization, taking them away from the control of a would-be tyrant. But what good was his idea now, when he was imprisoned and discredited?

Near despair, Knobs let his chin sink into his cupped hands.

"The worst of it is, most of the guys in this outfit will keep on respecting that crumby devil," he growled.

"Recognizing his superior knowledge, they'll swallow his yarns. They're the real dupes, and I'm only the goat!"

Presently Knobs heard a gong sound—a signal for the ship's company to come to the messroom for their cold rations. A minute later, there was a soft tap at the door of his prison. Evelyn Farnway's face was framed in the small barred window at its center.

"Be quiet, Knobs," she warned in a low whisper. "Nobody'd believe me except maybe you—now—but after a lot of observation and thinking, I'm convinced that St. Claire is the real blackguard! And we've got to try to cross him up some way, before we're all dead! Tell me about that world-turning trick of yours."

Knobs gasped, realizing that the girl must have followed the same line of reasoning that he had followed, in deciding St. Claire's guilt. But there was no time to waste in surprise, now.

"Okay, Evelyn," he whispered tensely. "Listen," he outlined his idea in as few words as possible, explaining what blasting some of the underground caverns here, near Nemesis' equator, would accomplish, and just how he believed physical laws would work to turn the planet more rapidly, and bring the dark hemisphere into the rays of Olympia. Knobs wished he had his dumb-bells. They would have helped him to illustrate his point.

"I'm not enough of a physicist to know whether your idea is any good or not," the girl breathed doubtfully when he had finished. "But it's the only chance of beating his nibs. St. Claire has been hinting that the men should retreat to the caverns. Oh, sure—it's considerably warmer there, we know by our tests. Traces of volcanic heat.

"But according to our tests, too, those grottoes are full of volcanic-acid vapors, which eventually would eat through the metal of space suits, killing whomever was inside. St. Claire isn't satisfied with just freezing us—he wants a quicker way to get rid of us all, so he can go ahead with his crooked work. But the men will probably fall for his gag—when the situation does get desperate enough!"

"Sure they will!" Knobs agreed grimly. "Anybody would with death from cold staring him in the face! If I could only get out of the brig!"

THE girl smiled at him. She reached a slim hand between the bars of the door. A little piece of metal gleamed in her palm—a key.

"I got this duplicate from the ship's safe," she whispered. "I've been around the office too much not to know the combination. You can let yourself out, all right. I got another key the same way—to the Special Supplies Room, where the radite explosive is. I'll meet you with it at the seldom-used freight airlock in five minutes."

Then Evelyn Farnway was gone, leaving Knobs Hartley with a stronger realization of her quiet beauty and charm—for it was all aureated now with a halo of sharp cleverness and reckless courage. He found it all a little dizzying. Because Evelyn was a girl, St. Claire had underestimated her resourceful nerve, and that had been her big advantage.

In a moment Knobs was out of the brig. There was no one about, for most of the ship's company were in the mess room. Within ten seconds more, Knobs had climbed a short ladder into a dusty, yard-high inspection-tunnel, used only on the rarest of occasions to examine the structure of the *Trail Blazers'* hull for signs of developing weakness. Thus, by a roundabout way, he reached the deserted freight room and airlock.

Evelyn arrived on schedule, through another inspection tunnel, lugging the long metal box of fearfully powerful radite capsules under one smooth little arm.

He took the box from her, and then helped her into a space-suit, of which there were several in the cabinet beside the lock.

"Well, here goes!" Knobs said through his communicator phones, when both of them were rigged out in vacuum armor, and had strapped levitator packs about their shoulders. "Here's to the coming dawn on Nemesis—I hope!"

The inner valves of the airlock opened ponderously at his touch of their control levers. Then the girl and he were out in the still, star-shot cold of eternal night. They were marching across crusted drifts of frozen air, faintly visible as ghostly presences in the lights from the ports of the *Trail Blazer* receding behind them.

There was no wind, here. There was scant gaseous atmosphere. There was only a mood of rigid, changeless death, locked in a spell of all but absolute zero. It held even the molecules of oxygen and water, which might have meant life to this world, chained and moveless in the silence of spectral drifts and hills and mountains.

The entrance to the caverns, previously blasted out by exploring space men, was reached at last. Evelyn and Knobs advanced into the completer darkness of that black maw, climbing down over rough rocks.

The electric heaters of their suits, operated by highly efficient batteries, had kept them warm, so far, in their venture, though already, here in the grottoes, the temperature around them must be higher. Their flashlights lit a path before them, through one black cave after another.

Colossal volcanic bubble-cavities, these grottoes seemed to be. They had been formed by the shrinkage of materials within Nemesis' once-fiery heart, molten with inner heat in the era before the powerful gravity of a fearfully heavy midget sun, named Olympia, had slowed the planet's rotation to a stasis in which alternate night and day no longer happened.

Down and down the two Terrestrials climbed, past gigantic masses of un-Earthly ores — fabulous food for Terra's teeming industries. Down and down, with the murk of volcanic acids beginning to blur and gnaw at the bright metal of the intruders' space-suits.

FINALLY they came to a tremendous vertical abyss, beyond the brink of which no human being had ever yet dared explore. Its depths were lost in utter blackness. Only instruments, depending on reflected radio beams, had told that it dropped almost halfway to the core of Nemesis.

"I'm scared, Knobs," the girl stammered, staring into that Sheol-like pit, her eyes wide in the reflected glow of their flashlights.

"Of course you're scared, Ev," Knobs returned with a perfectly natural unthinking familiarity that had a deep gentleness in it—a gentleness the girl needed. This was no occasion to pretend—it was too grim for that—and the little space-ship mechanic had lost the shyness which the accidental deformity of his sinister grin had always given him.

"I'm scared too, Ev," he went on. "But placing the explosives is a one-man job. Besides, you've done more than your share already. Get out of sight in a side-tunnel, so if St. Claire or anybody comes, you won't be discovered."

As he talked, Knobs opened the box of explosives. The hundred radite capsules within were one-inch spheres, each fitted with a button by means of which their fuses could be started. Each had a dial, too, to set those fuses for a certain period of time. Rapidly Knobs fixed each dial for a three-hour interval. Thus, all the capsules would blast at once, when the time came.

He closed the box again, picked it up.

"I'll be back here as soon as I can, Evelyn," he said.

Before she could protest his intrusion into that black abyss before them, alone, he had leaped over its brink. He had pressed a button on the levitator pack strapped to his shoulders. The powerful electric batteries there, much lighter in weight than any small atomic-generator unit could ever have been, fed current to a series of complicated coils that fought gravity. Thus, his rate of descent was completely under his control. His flashlight showed him where he was going.

Almost two hours later, he returned to the brink of the abyss, lifted there by his levitator. Its power was all but spent, now. His space-suit was tarnished and corroded with acid fumes, but his voice was happy as he spoke.

"Evelyn, where are you?" he questioned through his phones.

"Here, Knobs," she responded from out of a dark niche nearby. "St. Claire came with some of the men, looking for us. But I was in another cavern, hidden. His nibs found us both missing on board the ship—as well as the radite. Of course he guessed what we were up to. He went away at last, but I overheard some of his conversation through my communicators. He was hopping mad."

"I suppose he was," Knobs chuckled. "Well—I've got the explosive set, anyhow. I went down about twenty-five miles, placing radite capsules on rock ledges along the way. Then I dumped those I had left down into the deeper part of the pit. They're tough-shelled, you know, and can stand the shock of a fall without blowing up or breaking. Some of them must have bounced all the way to the bottom of this hole, hundreds of miles down."

"What do we do now? Go back to the *Trail Blazer?*" the girl asked.

"Yeah, I guess so," Knobs returned ruefully. "We can't very well stick around here in the caverns, or outside, either, with radite getting ready to blast. When that happens, we'd better have a stout space ship hull around us for protection!"

The prospect of returning to the star cruiser now was unpleasant and dangerous to say the least, with St. Claire in control there. They'd spoiled one of his plans already—that of getting rid of the crew by sending them to the caverns. The men certainly wouldn't take that hint—leaving St. Claire on the ship to continue his dirty work alone—now that they knew that the grottoes were mined!

EVELYN and Knobs reached the *Trail Blazer* without trouble. St. Claire and most of the Survey Group met them at the main airlock. St. Claire glared at them as they removed their vacuum armor, but there was something worried in his look, too. Perhaps he realized now that he'd neglected something in not listening to all of Knob's plan to make Nemesis turn faster. It was an unknown quantity that might trip him up somewhere.

"A woman and a madman," he sneered. "Neither can be trusted. I suppose you've carried out your scheme, Hartley—setting the radite bombs in the caverns—making certain that our last possible refuge from the cold is destroyed presently. Well, maybe you aren't just a maniac after all, Hartley. You can't both be crazy, and the girl is with you, obviously. So it begins to look as though you're both criminals, working together to hog the deposits of jandrium and dorsium ores here on Nemesis."

St. Claire had changed his tactics, because he had to. It would have been difficult to pose Knobs as a maniac now, before the crew, for the young mechanic could talk in his own defense, and they would see that he was not insane.

But no immediate opportunity was given to Knobs Hartley to deny the accusation of criminal activities. For just then the whole landscape seemed to heave and buckle, as if in the grip of some super quake. The radite explosion wasn't a single blast—rather, it was a long succession of violent shocks, vibrating up through the solid crust of Nemesis, shaking the metal plating of the *Trail Blazer,* and filling its interior with a dazing roar of sound.

There was a weird sensation of falling. The ship tipped crazily toward its nose, and seemed to slide—to toboggan—toward a lower level.

Many of the crew, assembled in the area before the inner valve of the airlock, were thrown off their feet. But even to the members of the Survey Group within the cruiser, the true magnificence of the spectacle was lost, for they could not see much beyond the windows of the well-built interstellar hull.

So they did not observe the vast plume of frozen air and ice that geysered upward under the frigid stars, as radite capsules planted far underground went off in close sequence, releasing atomic energy in a form far too violent for the shell of an atomic-generator to have withstood, even for the millionth of a second!

Mountainous heaps of white toppled grandly, and the ground sank away as

the stupendous grottoes beneath collapsed. Countless trillions of tons of material settled inward toward the core of the planet. The full force of those successive explosions was far from evident, above ground; but the settling caused by the cave-in of the caverns produced a gigantic crater miles deep, and more than a thousand miles in diameter.

The *Trail Blazer*, being on the surface in the first place, with the planet's crust merely sinking under it, was in small danger of being buried. But, for a minute, the vast, glacier-like sheet of frozen atmosphere and ice on which it rested raced grinding toward the deeper bottom of the crater, before it lodged against a mass of rock.

With quiet restored once more, St. Claire was quick to regain his voice.

"You see, men," he shouted to the crew. "We know what those explosions were. All the caves we could have reached, for even temporary safety and warmth, are gone now—destroyed. Before us, here, are the two people who are responsible! What should we do with them, men?" St. Claire's voice was grating and vengeful.

IT had become considerably colder aboard the *Trail Blazer*, since Knobs and the girl had made their excursion to the caverns. The heat was going gradually, sucked away by the chill of almost absolute zero outside. Through a murk of frosty breaths, Knobs saw eyes glaring at him sullenly.

Rough space hands, believing that they would soon all be corpses, could not be expected to show him much mercy, as long as they failed to see his purpose in blasting the grottoes, which might have saved them for a time, even though the volcanic acids there would have killed them in the end. Even Doctor Welden, the young physician of the ship, showed a grim jaw.

Evelyn, clinging to Knobs' arm, was in danger, too. Women had never been released from responsibility for their acts, and so she was also in the shadow of a hard if mistaken justice. Would the monumental idea for speeding up the rotation of a world fail or succeed? That was the big question now. Young Hartley had thought out that idea carefully—every detail—but he could not escape a certain ghostly doubt, now.

If his efforts proved a failure, death in disgrace would probably be his punishment. And Evelyn Farnway would be judged guilty with him. Even though he loved her, and though maybe she returned that love, now . . .

A space man named Jansen drew his ray pistol. Another and another followed suit. With slow steps they advanced, while St. Claire watched, his smooth, effeminate face Satanic in anticipation of the deaths of the two whom he must have realized were his worst enemies—the people who would expose his treacheries, if anybody would.

But Knobs could not accuse him of sabotage and murder, yet. His position as a noted scientist entrenched him too well in the respect of the crew. They wouldn't believe a direct charge. He'd have to stall for time. He'd have to show the Survey Group the ancient principle of the wonder he had meant to accomplish.

"Doc Welden," he said quietly. "Do me a favor. Go to my quarters and get my dumb-bells out of the locker. Bring a stool, too—one with a rotary seat."

Welden looked puzzled; but he had plenty of fair play in his nature. Without commenting, he turned and disappeared down a corridor, while sullen space hands stood by, still threatening, but curious.

Presently Welden returned with the stool and the dumb-bells. Knobs set the former on the floor. Then he took a dumb-bell in either hand and seated himself carefully, holding the heavy exercisers out to either side of him, at arm's length. Next, kicking at the floor, he started his whole body spinning with the top of the rotary stool.

Finally, with his feet free of the floor, he drew the dumb-bells inward, to his chest. Immediately, his rate of rotation on the stool increased very noticeably. He thrust the dumb-bells out laterally again, and slowed. He

pulled them in for a second time, and speeded up once more.

It was an old, old physics lab stunt, known to college and even high school students, a thousand years ago.

"Not a difficult trick to understand," Doc Welden commented. "When the dumb-bells are held out at arm's length, they travel in a wide circle that has a pretty good distance around. But when you draw them inward, they try to travel at the same speed, because they're massive, and possess a lot of inertia and kinetic energy. Still, drawn in, the circle they're rotating in is much smaller, with a much lesser circumference.

"So, in order to move at approximately the same speed that they did originally, they have to make maybe twice as many turns in a given time. Gear-up—like a big gear turning a small gear. The cogs of both travel at exactly the same speed. But the small gear makes several turns, while the big gear makes one."

KNOBS was sitting quietly now, with his exercisers against his knees. Evelyn, to whom he had already explained his idea fully, spoke for him.

"That's right," she said, looking around at the glowering, puzzled men. "But don't you get the rest of it now, too, Doc? All those cubic miles of stone and ore falling toward the center of Nemesis, when the caves blew up?"

Welden's eyes widened, and there was a surprised muttering among the men.

"Why of course!" the young physician exclaimed. "It should be—the same thing, exactly! Normally, Nemesis rotates on its axis in seven Earth-days. The collapse of the grottoes—the shifting inward of so much mass toward the planet's pivot of rotation—is previsely the same as the act of drawing the dumb-bells toward your chest! Mass, with the kinetic energy of a certain speed, forced to travel in a smaller circle! Nemesis should be rotating a little faster now! The dark hemisphere should be turning toward the dwarf sun! Friends, maybe we aren't going to be changed to cold and stiff icicles after all!"

Knobs looked challengingly at St. Claire. The latter's face betrayed confusion. Scientist though he was—he was not accustomed to these ancient, simple principles of physics. Plainly he had not expected the mechanic, whom he had tried to blame for his own wrongs, to have such a sound idea!

"It won't work!" he stammered. "It's silly!" But there was no conviction in his tone. Undoubtedly there *was* tremendous rotary energy in those cubic miles of rock that had shifted downward!

Then Evans, the Expedition's astronomer, burst into the room before the airlock. "The stars have moved a little," he announced breathlessly. "Across the sky, and faster than is natural! What can it mean?" He hadn't been present to watch Knobs' demonstration, so of course he didn't know what was happening.

"The stars moving, eh?" Welden questioned quietly. "That's the final evidence. We're turning, boys—turning toward safety and warmth!"

Eyes swung inquiringly toward Knobs and Evelyn, and toward Arnold St. Claire, who had painted them so blackly. Knobs felt a wave of fierce triumph. He had saved the Survey Group. He had saved the mines of Nemesis for free colonization from a greedy crook and murderer. Or so he thought, for a moment. He believed he had the scientist driven into a corner, where he must reveal his guilt.

But St. Claire was clever, as the next moment proved. His confusion steadied.

"Then I owe you an apology, Hartley," he said with seeming sincerity. "You're not what I thought you were—but a hero. Somebody else must have rayed Ned Kilmer, our leader, and stripped the atomic generators. I'm sorry for my mistaken attitude, Hartley."

And so Knobs could only feel a fierce frustration, as St. Claire hid behind a wall of innocence and error. Knobs was still sure of his guilt, but there was no concrete evidence on which to accuse him. Not a chance!

GAS ON STOMACH
may excite the Heart

Gas trapped in the stomach or gullet may act like a hair-trigger on the heart action. At the first sign of distress smart men and women depend on Bell ans Tablets to set gas free. No laxative but made of the fastest-acting medicines known for symptomatic relief of gastric hyperacidity. If the FIRST TRIAL doesn't prove Bell ans better, return bottle to us and receive DOUBLE Money Back 25c at all drug stores.

SEND NO MONEY!
16 DAYS' TRIAL
Newest Styles
GLASSES by MAIL
$2.95 & Up COMPLETE
We GUARANTEE SATISFACTION or Your Money Back! We also Repair BROKEN GLASSES.
U.S. FREE Catalog and Information!
EYE-GLASSES CO., 1557 Milwaukee Av., Dept. I-82, Chicago

IF I Send YOU THIS FINE SUIT—
Will You Wear It and Show It to Friends?
I need a reliable man in your town to wear a fine made-to-measure, all-wool DEMONSTRATING SUIT—advertise my famous Union clothing and take orders. You can make up to $12.00 in a day. My line contains over 150 quality woolens, all sensational values, guaranteed.
CASH IN ON PARTIAL PAYMENT PLAN
You need no experience or money. I supply everything required FREE. Write me today for FREE details.
STONEFIELD, 1330 W. Harrison, Dept. A-977, Chicago

SONG POEM WRITERS
Write today for free Booklet outlining profit sharing plan.
ALLIED MUSIC
Dept. 32, 7608 Reading, Cincinnati, O.

RUPTURED?
Get Relief This Proven Way

Why try to worry along with trusses that gouge your flesh—press heavily on hips and spine—enlarge opening—fail to hold rupture? You need the Cluthe. No leg-straps or cutting belts. Automatic adjustable pad holds at real opening follows every body movement with instant increased support in case of strain. Cannot slip whether at work or play. Light. Waterproof. Can be worn in bath. Send for amazing FREE book, "Advice To Ruptured," and details of liberal truthful 60-day trial offer. Also endorsements from grateful users in your neighborhood. Write:
CLUTHE SONS, Dept. 33, Bloomfield, New Jersey.

Read the "Big Three" in Comics

THRILLING COMICS

STARTLING COMICS

EXCITING COMICS

EACH **10c** AT ALL STANDS

But at least the scientist's tricks were badly gummed-up, now. Getting rid of the Survey Group wasn't going to be so easy for him.

Yet all Knobs could do at present, was to give a warning.

"Keep on your toes, folks," he advised. "Somebody here is our enemy."

The ship's company could only wait, now, watching the dropping thermometer, and the frost rimming bright metal here within the *Trail Blazer*, as the chronometers counted the passing moments.

BUT when about a hundred hours had dragged by, a pale glow appeared in the east, spreading, brightening.

"The dawn," Evelyn said quietly, pointing. "The first dawn that this half of Nemesis has known for maybe a billion years!"

She was right, of course. Slowly Olympia climbed over the frigid, hellish horizon, casting hot rays over blue-white snow.

Olympia was a tiny star, but its distance was less than a million miles, its apparent diameter in the sky of Nemesis was almost four times that of the Sun as seen from Earth, and its radiations were torrid.

Swiftly the frozen air began to steam and melt. Magnificent white mountains began to collapse and settle. Slush began to thicken in the vast crater produced by Knob's blasting. Soon the *Trail Blazer* would be afloat on a sea of water.

The entire Survey Group was gathered in the crystal-walled observation room. In awe, silent space men looked at the thrilling spectacle beyond those transparent barriers. The air and water of Nemesis were being released from the congealed graveyard of the dark hemisphere, where they had gradually accumulated through the ages.

The air was being freed to circulate, now, all over the surface of this world. Nemesis, the planet of contrasting halves until now, one face a blazing, sun-blasted desert, the other a cold, black tomb, was becoming habitable again.

In a few months, now, the colonists and miners would be arriving, from Earth. Free men, staking out their

claims under Universe Government supervision. No tyrant would rule their labors—or so at least Knobs Hartley and Evelyn Farnway were thinking, as they stood arm in arm before the crystal walls of the observation room. The grandeur of what had happened thrilled them immeasurably—so that they forgot possible disaster.

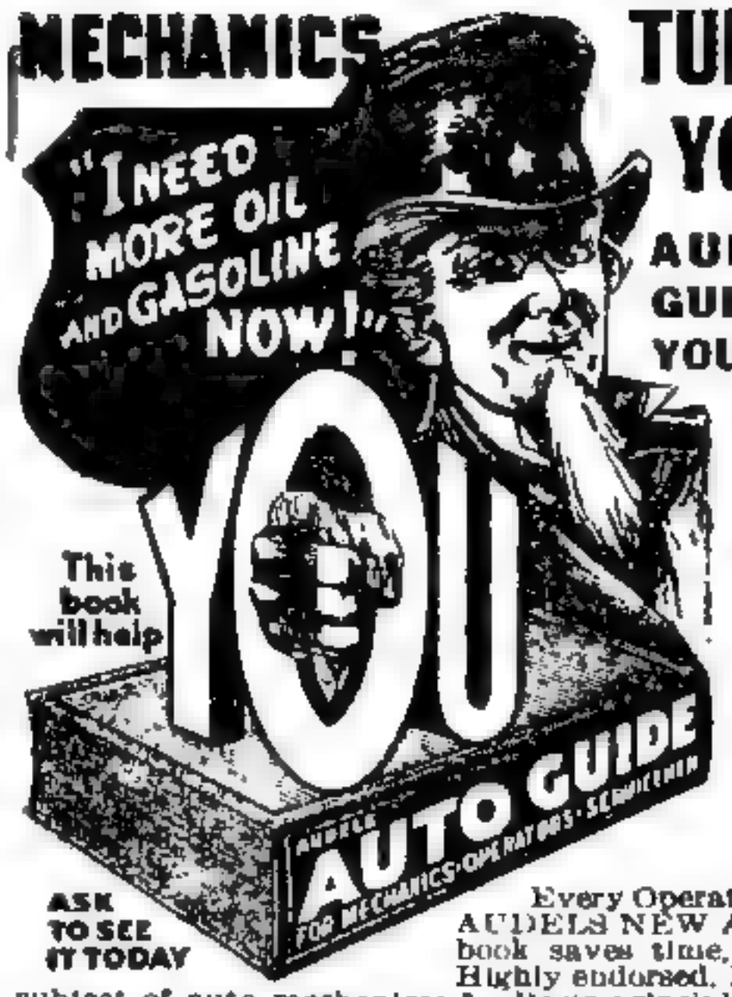
Arnold St. Claire wandered near.

"Again I apologize humbly," he told them with a slow smile. "Nemesis has a day and night, now, and will continue to rotate just as it is at present for hundreds of years before the tidal drag of Olympia can slow it again. Though I think modern science in the form of space-ship drive-units will be applied to speed up its spin still further when the mine colonies the established here. You've had a great triumph, Knobs."

Hartley was almost completely off guard at that moment, made so by the treacherous thrill of success, which prompted him even to be magnanimous with St. Claire.

But the latter leaped back suddenly, two ray pistols leveled in his hands.

[*Turn page*]



TUNE UP YOUR CAR!

AUDELS AUTO GUIDE ANSWERS YOUR QUESTIONS ON MOTOR SERVICING WITH NEW SHORT CUTS —PRACTICAL POINTERS.

NEW FLUID DRIVE FULLY EXPLAINED!

Every Operator & Mechanic needs AUDELS NEW AUTO GUIDE. This book saves time, money and worry. Highly endorsed. It presents the whole subject of auto mechanics: 1—Basic principles, 2—Construction, 3—Operation, 4—Service, 5—Repair. Easily understood. Over 1500 pages 1540 illustrations showing inside views of modern cars, trucks and buses with instructions for all service jobs.

DIESEL ENGINES FULLY ILLUSTRATED
To Get This Assistance for Yourself Simply Fill in and Mail Coupon Today.

A USEFUL XMAS GIFT

$4 COMPLETE • PAY ONLY $1. A MONTH •

AUDEL, Publishers, 49 West 23rd St., New York
Mail AUDELS NEW AUTO GUIDE for free examination. If O. K., I will send you $1 in 7 days; then remit $1 monthly until price of $4 is paid. Otherwise I will return it.

Name ----------
Address ----------
Occupation ----------
Reference ---------- PAL

Read STARTLING STORIES Every Issue!

New... unique

THE MODERN STYLE PIPE ... broken in With real tobacco

UNIQUE pipes are absolutely new and different. Imagine *all* these features! *Pre-caked bowls*—broken in for you with real tobacco. *Saddle bits* . . . usually found in $3.50 or higher pipes. Selected first quality triple-cured briar.

22½% LIGHTER WEIGHT

New streamline design makes UNIQUE pipes 22½% lighter...easier on the jaw. A perfect balance between bowl and bit to give you the most comfortable smoke you've ever had. UNIQUE pipes *look* right . . . *feel* right . . . *smoke* right. For a unique smoke . . . get a UNIQUE pipe!

Henry Leonard and Thomas, Inc., Dept. A, Ozone Park, New York

If your dealer cannot supply you, send $1.00. Medium, large, extra large styles. Black Stem or Transparent Amber.

NAME_____

STREET_____

CITY_____ STATE_____

WANTED

MEN & WOMEN

WORK for the U. S. GOVERNMENT

Salaries $1700 - $2600 Per Year

No Layoffs! Pensions! Vacations with Pay! Regular Raises!

A LIFETIME JOB

RAILWAY POSTAL CLERKS
City Mail Carriers — Clerks-File Clerks
Post Office Clerks — Steno-Typists
Rural Mail Carriers — Customs Inspectors
PATROL AND IMMIGRATION INSPECTORS

Pay for Course Only After You Are Appointed and Working

So sure are we that our simplified Interstate Home Study Course of coaching will result in your passing the Government examination and being appointed, that we are willing to accept your enrollment on the following basis. The price of our complete 10 week lesson course is $30, plus $5 Examiners' Fee.

We are willing to give you any course with the understanding that you are to pay for it ONLY AFTER YOU ARE APPOINTED AND WORKING FOR THE GOVERNMENT.

Get Ready Immediately **FULL Particulars FREE!**

Clip and Mail this Coupon NOW

INTERSTATE HOME STUDY ACADEMY T-11
901 Broad St., Div. T-11, Newark, New Jersey

Please RUSH me FREE particulars, without obligation, how to qualify for a Government Job.

Name .....

Address .....

City ..... State.....

SONGWRITERS

Original songs and song poems wanted. NO CHARGE FOR MELODIES. Marketing Service. Free Examination.
HOLLYWOOD RECORDING STUDIOS
Dept. B18, Box 67, Preuss Sta. LOS ANGELES

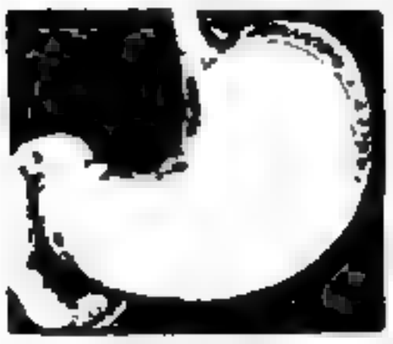
FALSE TEETH

LOW AS $7.95

90 DAYS' TRIAL
TEST THEM
EXAMINE THEM

We make FALSE TEETH for you by mail from your own impressions. You have satisfaction of MONEY BACK GUARANTEE. Customers in United States and Canada report SATISFACTION but you be your own JUDGE.
SEND NO MONEY WRITE TODAY for FREE BOOKLET and MATERIAL.
CLEVELAND DENTAL SUPPLY CO.
Dept. 2-A2, East St. Louis, Illinois

FREE SAMPLES OF REMARKABLE TREATMENT FOR
Stomach Ulcers
Due to Gastric Hyperacidity



H. H. Bromley, of Shelburne, Vt., writes: "I suffered for years with acid-stomach trouble. My doctors told me I had acid stomach ulcers and would have to diet the rest of my life. Before taking your treatment I had lost a lot of weight and could eat nothing but soft foods and milk. After taking Von's Tablets, I felt perfectly well, ate almost anything and gained back the weight I had lost." If you suffer from indigestion, gastritis, heartburn, bloating or any other stomach trouble due to gastric hyperacidity, you, too, should try Von's for prompt relief. Send for FREE Samples of this remarkable treatment and details of trial offer with money back guarantee. Instructive Booklet is included. Write:
PHILADELPHIA VON CO. Dept. 187-J
Fox Building, Philadelphia, Pa.

Thus he faced the entire crew. He could blast them to ashes in an instant.

"Yes, you had a great triumph, Hartley," he sneered. "You had me badly confused for a while, with your clever if outmoded engineering! Yes, I rayed Ned Kilmer, our leader, and I stripped the generators, too, as I think you guessed. But I'm winning in the end, anyway. I'll claim the mines when I've got rid of you all! See that metal box glistening out there in the snow? It contains the missing vitals of the generators.

"I hid that box outside there in the ice and congealed atmosphere, and of course when the glacial mass on which the *Trail Blazer* rests slipped toward the bottom of the crater, the box was brought along, too . . . Everybody please move toward the main airlock. I don't want any incriminating evidence aboard the ship when I go to some colonial planet. Now march—quick!"

OBEDIENCE was the only way. Hoping somehow to have a further chance — a moment to plan escape from this true madman, the thunderstruck members of the Group all yielded to his will. And that was an unseen salvation in itself.

In the slush on which it rested, the balance of the *Trail Blazer* was far from secure. Overbalanced by the weight of the humanity being herded into the airlock, it tipped suddenly on its side. With a grunt, Arnold St. Claire was thrown off his feet. The aim of his deadly weapons was completely spoiled, for one small necessary moment.

A half dozen brawny men leaped, screaming revenge. When the commotion had quieted, Arnold St. Claire's head was a crushed, pulpy mass, trampled against the steel floor.

Knobs turned away, sickened. Evelyn clung to him, weeping in emotional relief. It was all over, now, they knew.

After a few minutes Dr. Welden chuckled nervously.

"I've got your wedding present all figured out, folks," he said.

Evelyn looked at him, startled.

Curiosity was getting the better of her tears.

"Why—what kind of a present is it?" she stammered eagerly.

"It's about Knobs' grin," Welden responded. "I'm going to lengthen that damaged tendon in his neck. A hero with a wife as beautiful as the girl he's picked can't go around looking like a Venusian jungle-imp. . . ."

•

Next Issue

TARNISHED UTOPIA

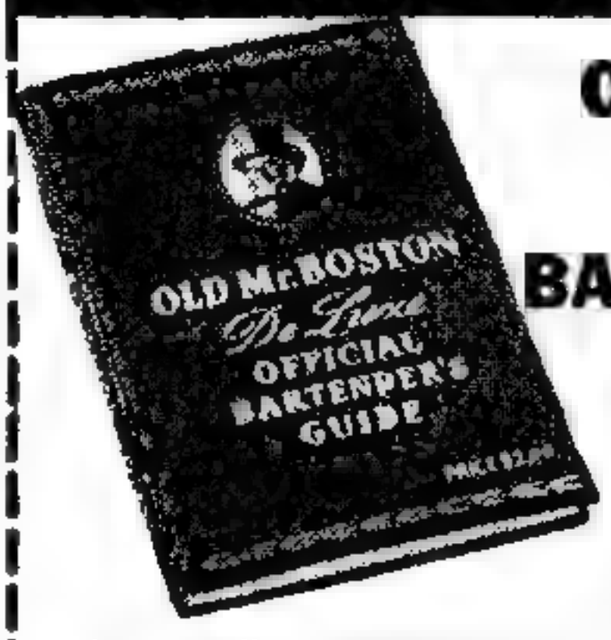
A Complete Book-Length Novel of the Future

By

MALCOLM JAMESON

•

NOW AVAILABLE TO THE PUBLIC!



OFFICIAL 1941 BARTENDER'S GUIDE

Only **35¢**

From the "Angel's Kiss" to the "Zombie"—here's practically every drink known to man...753 Tested Recipes! All fully indexed in a book of 157 pages with a gold embossed maroon leatherette cover. List price, $2.00.

Send 35c in stamps or coins to Old Mr. Boston, 1012 Massachusetts Ave., Boston, Mass. Your copy will go out, postpaid, by return mail

FREE! $5.00 Full Size FOOD & HOUSEHOLD PRODUCT ASST.

Send No Money! Rush name and address for big Assortment of FOODS GROCERIES, SOAPS, Etc.—full size packages, worth $5.00. Yours ABSOLUTELY FREE! Show these products to friends, neighbors. Take orders for sensational values more than 200 quality products used in every home. Earn big profits, full or spare time. No experience necessary. Write for FREE $5.00 Assortment of Products NOW. ZANOL, 3891 Monmouth, Cincinnati, O.

How do you KNOW you can't WRITE?

Had Never Written a Line—Sells Article Before Completing Course

"Before completing the N.I.A. course, I sold a feature to Screenland Magazine for $50. That resulted in an immediate assignment to do another for the same magazine. After gaining confidence with successive feature stories, I am now working into the fiction field. Previous to enrolling in the N.I.A. I had never written a line for publication, nor seriously expected to do so."

—GENE E. LEVANT.
116 West Ave 28, Los Angeles, Calif

HAVE you ever tried? Have you ever attempted even the least bit of training, under competent guidance?

Or have you been sitting back, as it is so easy to do, waiting for the day to come when you will awaken all of a sudden to the discovery "I *am* a writer"?

If the latter course is the one of your choosing, you probably *never will write*. Lawyers must be law clerks. Engineers must be draftsmen. We all know that, in our times, the egg does come before the chicken.

It is seldom that anyone becomes a writer until he (or she) has been writing for some time. That is why so many authors and writers spring up out of the newspaper business. The day-to-day necessity of writing of gathering material about which to write—develops their talent, their insight, their background and their confidence as nothing else could.

That is why the Newspaper Institute of America bases its writing instruction on journalism—continuous writing the training that has produced so many successful authors.

Learn to write by writing

NEWSPAPER Institute training is based on the New York Copy Desk Method. It starts and keeps you writing in your own home, on your own time. Week by week you receive actual assignments, just as if you were right at work on a great metropolitan daily. Your writing is *individually* corrected and constructively criticized by veteran writers. You will find that (instead of vainly trying to copy someone else's writing tricks) you are rapidly developing your own distinctive, self-flavored style—undergoing an experience that has a thrill to it and which at the same time develops in you the power to make your feelings articulate.

Many people who *should* be writing become awe-struck by fabulous stories about millionaire authors and give little thought to the $25, $50 and $100 or more that can often be earned for material that takes little time to write — stories, articles on business, fads, travels, sports, recipes — things that can easily be turned out in leisure hours, and often on the impulse of the moment.

Let us help you test your native abilities. Our interesting Writing Aptitude Test will do it. It's free—entirely without obligation. Send the coupon today. Newspaper Institute of America, One Park Avenue, New York. (Founded 1925)

NOTICE

Men of Draft Age

No need to hesitate to test your writing ability, even though you are of conscription age. N.I.A. agrees to refund in full the tuition of anyone accepted as a student, who is subsequently called for military service. Special terms and privileges for men in U. S. Armed Forces.

Newspaper Institute of America
One Park Avenue, New York

Send me, without cost or obligation, your *Writing Aptitude Test* and further information about writing for profit.

Mrs.
Mr.
Miss .....

Address .....

(All correspondence confidential. No salesman will call on you.)
94A362

Copyright 1942 Newspaper Institute of America

TIGHTENS
FALSE TEETH
or No Cost!
JIM WON'T EAT OUT BECAUSE HE LOSES HIS FALSE TEETH
BOB NEVER HAS PLATE TROUBLE
RUTH SAYS BOB NEVER HAS PLATE TROUBLE
I'LL ASK HIM FOR HIS SECRET
BOB, HOW DO YOU KEEP YOUR PLATE FROM SLIPPING?
C'MON! A SQUEEZE OF CROWN RELINER KEEPS 'EM TIGHT!

OUR AMAZING OFFER

Don't suffer embarrassment and discomfort caused by loose dental plates. Apply CROWN RELINER. In a jiffy your plate fits like new and stays that way up to 4 months. No old fashioned heating to burn your mouth. Just squeeze CROWN from tube and put your teeth back in. They'll fit as snugly as ever. Inventor is a recognized authority in dental field. A patent has been applied for CROWN RELINER to protect you from imitators. After you reline your plate with CROWN, take your false teeth out for cleaning without affecting. Use CROWN **RELINER**. CROWN RELINER is guaranteed. It is harmless. **NOT A POWDER OR PASTE!** If not satisfied, even after 4 months, return partly used tube for full refund.

J. Clements of Algonac writes: "My plates were so bad they rattled when I talked." Now I can eat steaks or corn on the cob." Reline your plate with CROWN. It's tasteless. Has that natural pink color. Order a tube of CROWN RELINER today . . . enough to last a year. We include **FREE** a tube of CROWN plate cleaner. **SEND NO MONEY.** Just send name and address. Pay postman $1.00 (or combination plus postage) or send cash and we pay postage. Act at once and enjoy this new happiness.

CROWN PLASTICS CO., Dept. 2301
4358 W. Philadelphia Ave., Detroit, Mich.

GLASSES as LOW as **$1.95 PAIR**

16 DAYS TRIAL

Choice of the LATEST STYLES—remarkably LOW PRICES. SATISFACTION GUARANTEED or your money back. If you are not satisfied—they will not cost you a cent.

SEND NO MONEY Write for FREE catalog today showing all of our many styles and LOW prices!

ADVANCE SPECTACLE CO.
537 S. Dearborn St., Dept. T-J Chicago, Ill.

BROKEN GLASSES REPAIRED AT LOW COST!

Quit Using Tobacco!
Write for Free Booklet and Learn How.
Results Guaranteed or Money Refunded
THE NEWELL COMPANY
152 Clayton Station St. Louis, Mo.

100,000 Satisfied Users

SAVE UP TO 50% FACTORY-TO-YOU

9 BANDS (ON 6 DIAL SCALES)

30 DAYS TRIAL

20 TIMES BETTER FOREIGN TUNING with SUPER BAND SPREAD RADIO!

PUT THIS "CHASSIS" IN YOUR PRESENT CABINET

E-Z TERMS

UP TO $50.00 TRADE-IN

WRITE for big FREE catalog. New 1942 models include Radios, Radio-Phonos, Home Recorders. Sensationally low factory-to-you prices. $12.95 to $212.50.

16 TUBES (User-Agents Wanted).

$19.95 COMPLETE with SPEAKER, TUBES, PUSH-BUTTON TUNING, MAGNA TENNA LOOP AERIAL READY TO PLAY

MIDWEST RADIO CORPORATION
DEPT. 62-F CINCINNATI, OHIO

THE ETHER VIBRATES

(Continued from page 11)

So, Kiwi Hempling, outside of the authors, the illustrators and the departments, we have a magazine. Nice piloting, Peelot. Like spacing a ship from Earth to Pluto without fuel, astrogation instruments or a hull. But you'll be all right after you take your third spacemen's test for gravity and equilibrium. (If you're not, the old sarge will pin your ears back with a rocket dredge.)

Comes now a barrage from the Heaviside Layer. Another one of these kiwis getting high on my private stock of Xeno again.

LADIES IN RED

By Paul Carter

Quick! Bring on your Xeno! It's happened! So, I turn to page 121 of the November S. S., and what do I get? I get blown open. I get reduced to atoms. If you don't believe me, just look at Paragraph Eight. Now, I am willing to concede the point about being unable to read, even if the part of the story Belarski illustrated **was** far-fetched. (In fact, there are quite a number of things which, the evidence being so overwhelming, this humble individual has to concede.) But space-mad? Hah!"

Of course, I'm not space-mad! Even the little doctor in the white coat who guards my padded cell tells me Reader Singer is wrong. And **he** ought to know.

So bring on the Xeno, before somebody around here does something desperate, meaning me.

And now to the much-abused cover.

I knew it would happen. Ever since Belarski started to do your covers, I've been dreading the advent of the wild-eyed female, clad (partially) in flaming, ghastly, scarlet **red!**

Why, the poor BEM looks positively tame in comparison. In fact, I'd sooner have a BEM on a cover than a wild-eyed female any day, except for the rare case in which the artist has enough genius to save the picture from being typical pulp. (Finlay, for example). But even in that last case, I would still condemn the picture if the artist clothed his heroine in that awful RED!

In other words, tell the Art Director to hold a club over the heads of Belarski, Scott and company. And, just to make matters worse (hold on to your hat, Sarge) I hereby announce another society (listen to 'em groan). This time it is the SFTAOPCWFAROTFSFM—the Society For The Abolishment Of Pulp Covers With Females In Red On Them From S. F. Mags. Furthermore, if bigger and better BEMs will displace the females, then I hereby align myself with the growing numbers of Anti-Algerites. (Of course, another way to dispose of the menace would be to use Finlay, if the women are necessary. Yes, I know that crack will be deleted from this missive, but it was a good idea, anyway.)

I suppose Millard's novel came from the same author's article on the Kansas meteorites which ran in another magazine. Still, good. Very good. And a big, beautiful bouquet for having the aliens be helped by the hero instead of destroyed. Again, very good. And thanks for Wesso's return. I thought he was lost forever. But keep John Burroughs, nevertheless.

Hall of Fame novelette; hokay, but it can't possibly come up to the last two. "Trail's End" better than "Last Laugh," by many a long parsec. There's the line-up.

So! Another year is over! This is your third, isn't it? Well, here's the annual report.

First we find "Gateway to Paradise." Good old Williamson. What would we do without him?

Second "The Water World"—even if some people don't like Oscar J. Friend. I'm one of the minority who do.

Third "Sojarr of Titan"—even if it was an adventure story. Ah, well—

Fourth "A Yank at Valhalla." Hamilton's another old standby, like Williamson. More!

Fifth, "The Gods Hate Kansas". Enough said.

Sixth "The Bottom of the World." It's too bad such a fine yarn has to be last, as it's considerably better than a couple of other novels you've run.

Best Hall of Fame story was C. A. Smith's, "City of Singing Flame."—156 S. University St., Blackfoot, Idaho.

Well, I can't find much to grumble about in that letter, Pee-lot Carter. You don't care for the ladies; I do. When you've done as much space-roving as the old Sarge, risking your skin on freighters and liners of all types which ply the void, you'll think differently about a lot of things. And see here, I'm getting a bit space-sick on all this harrying of Belarski. What do you birds think—wait half a rocket-blast. I see something else on the spindle. Take a good glance at this through your electro-telescope.

A CHAMPION FOR BELARSKI

By Stanley Goldberg

This letter is about that dumb guy "Bill Adams," who in the July issue wrote such a long letter criticising practically everything good in your swell magazine. About the only thing he said right was that Belarski is one swell artist.

He said that the short story "The Eternal Moment" was good, but I think its ending was the bunk. As for "Over the Space-Ways," it was pretty good. I've read only five STARTLING STORIES, and they're all swell. I know because I've read THRILLING WONDER STORIES pretty long, and I love Ed Hamilton's CAPTAIN FUTURE.

The five STARTLING stories I've read are:

"The Black Flame.
"Twice in Time"
"Sojarr of Titan"
"The Water World"
"The Gateway to Paradise"

And, boy, was that enjoyable reading; I'd like to know if any of the regular fans of this magazine would lend me the following four stories.

"The Three Planeteers"
"The Prisoner of Mars"
"A Yank at Valhalla"
"Five Steps to Tomorrow"

I'd appreciate it immensely. Also, I must tell you how I enjoyed all the short stories, especially "The Man-Beast of Toree." Thanks a million, and I hope we meet on Mars some bright sunny day.—1402 Nelson Ave., Bronx, N. Y.

So you want to meet me on Mars, eh? Well, distinctly not in Sllurrpy Joe's Xeno Cafe, young fellow. And see here, if you want certain stories you can't procure from your newsdealer, why not join one of the many SCIENCE FICTION LEAGUE chapters and see what you can find in their library? Back numbers are scarce as Saturnian Glow-grub shortcake on Mercury.

Speaking of the flora and fauna of the various planets reminds me that Frank Belknap Long's hero, Carstairs, is collecting quite a freakish assortment of stuff for his botanical gardens. He's bringing to light certain rare specimens that the old Sarge thought no other man in the System had ever seen. Yeah, I know I'll be talking

[*Turn page*]

"Haven't got what it takes? Who? ME?"

Yes, it often *is* a shock to discover what others really think about you. And while they may be completely wrong, still . . .

Why not *prove* that you're going places—why not make more money?

Do you *dare* say you lack the opportunity when thousands are winning raises, promotion, through LaSalle's new home-study training?

Let us send you free that fascinating book: "Ten Years' Promotion in One." Write for it *today!* There's no obligation—nothing but a challenge, an inspiration, that can make money for you!

Ask also for one of these interesting books on *your* chosen field.

LaSalle Extension University

A Correspondence Institution

Dept. 1329-R Chicago

Please send me, without cost or obligation, "Ten Years' Promotion in One" and also the book on the business field checked below:

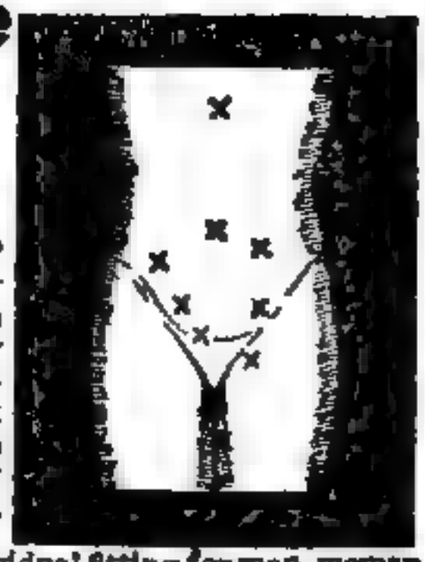
☐ Accountancy ☐ Law ☐ Traffic Mgt.
☐ Business Mgt. ☐ Modern Salesmanship

Name .....

Address .....

City ..... *State* .....

Is Your Rupture HERE?



Why continue to suffer with rupture? Stop your worries and fears. Send for the facts about my perfected truss invention—the Brooks Appliance for reducible rupture—with the automatic AIR-CUSHION support that **gives Nature a chance to close the opening.** Thousands bought by doctors for themselves and patients.

Sent on Trial—Made-to-measure, individual fitting for man, woman or child. Low-priced, sanitary, durable. No obnoxious springs or hard pads; no metal girdle to rust. Safe and comfortable. Helps Nature get results. Not sold through stores—beware of imitations. Write today for full information sent free in plain sealed envelope

BROOKS APPLIANCE CO. 182-B State St. Marshall, Mich.

PATENTS SECURED

Little ideas often have big commercial possibilities. Two valuable, advisory books—FREE. Also Important "Evidence of Invention" form. Write today. Victor J. Evans & Company, 607-A Victor Building, Washington, D. C.

FALSE TEETH

As Low As $7.95 Per Plate

Made in our modern laboratory from your mouth impression. Satisfaction or money back. SAVE MONEY—ORDER BY MAIL.

Write TODAY for full particulars, FREE impression material, and Illustrated Folder showing our many styles of dental plates

90 Days' Trial

MARVEL DENTAL COMPANY
Dept. 59-J, 343 S. Dearborn St., Chicago

SEND NO MONEY!

THOUGHTS HAVE WINGS

YOU CAN influence others with your thinking! Learn to impress others favorably—*get across your ideas.* Let the Rosicrucians show you how to use the power of mind. For *free book* write Scribe M. M. R.

The ROSICRUCIANS (AMORC)
San Jose, California

MUSCLES ACHE?

Feet "Killing You"? Do You Feel All-In After a Hard Day's Work?

Don't suffer unnecessarily from the torture of stiff, sore, tired muscles . . . or burning, aching feet . . . due to work or exercise. Get soothing, refreshing relief, quickly and easily! Just give yourself a brisk rub with **ANDY LOTSHAW All-Purpose BODY RUB.** Let this secret formula of Andy Lotshaw, famous athletic trainer of the Chicago Cubs Baseball Team and Chicago Bears Football Team, bring new pleasures into your life! Soothing oils enable your fingers to work deep down to painful areas in your tired, aching back, shoulders, legs, arms and feet—easing muscular discomfort due to hard work or exercise, speeding circulation that carries away pain-causing fatigue acids faster. Get welcome relief the way thousands upon thousands do—massage with **ANDY LOTSHAW All-Purpose BODY RUB.** Mail a dollar bill ($1.00) for large bottle today to Andy. Address him

ANDY LOTSHAW
Dept. K, 230 N. Michigan Ave., Chicago
Money back if not satisfied!

about a series in THRILLING WONDER STORIES. So what? I lecture the majority of you space-bugs in that class of astrogation, anyway, so you know what I'm talking about, and those of you who don't—well, you're missing a number of good bets by not reading that space sheet.

Anyway, the old space dog thought of starting a collection of specimens to substantiate his stories of personal adventures, but I couldn't finance a Noah's Ark of space. Anyway, again, Captain Future beat me to this idea of a traveling circus with his "Magician of Mars." Which brings me up short in a space skid at this letter from a member of such a troupe. On a neat letterhead printed in blue, I read the name, CORIELL ATTRACTIONS—CIRCUS AND VAUDEVILLE ACTS. Let's dig in and take the message. Clamp tight your head phones, kiwis.

A BURROUGHS BROS. FAN

By Vernell Coriell

I started buying THRILLING WONDER STORIES because there was a story in it written by the Burroughs boys, "The Man Without a World." After all too long a wait I was finally rewarded by another story by them. This time it was the "Lightning Men." Both, I thought, were very fine stories.

I had never bought a copy of STARTLING STORIES until I saw another story by the boys in it last month. "The Bottom of the World" was even better than their first two stories. I will continue buying the mags if you will continue printing stories by the Burroughs boys as often as possible. John Coleman Burroughs' illustrations are tops, too.

Just thought I would let you know.—1301 Ann Elyza St., Pekin, Illinois

I take it, Pee-lot Coriell, you like the Burroughs boys. I believe you mentioned them casually in your letter. And say, in your family's line of business, how come you didn't read "The Magician of Mars" in CAPTAIN FUTURE? You'd like that one. No, this isn't a plug. The old Sarge rides herd on the whole three-ring circus, you know, and he takes the chief astrogator's privilege of mixing his rings and metaphors.

And short my circuit and call me sparks if here isn't a communique on a railroad freight billing machine, or it could be a telegraph typewriter. Anyhow, the message is hot, and I'm holding it smack-dab up to the televisor for your scrutiny.

PLAIN TALK

By J. B. Hown

May I take advantage of your patience to the extent of stating that your cover artist is the worst exponent of the art you have so far employed. Mr. Belarski's work is marked by a crudity and sameness fit only for Western and Detective stories and all very well in its proper place. Every cover he has executed (and the word may be taken literally) for you has been strictly along the same lines. He seems to continually depict the main characters of his subject story at bay and confronted by semi-human or bestial menaces in practically the same positions. If you will take all your recent issues of STARTLING STORIES and THRILLING WONDER STORIES and compare the covers you will find that the only basic difference is the apparel of the characters and the nature of the menace

The above is intended as constructive criticism and I hope that a slight incoherency of expression may be excused inasmuch as it is prompted by a real interest in your publications STARTLING STORIES and THRILLING WONDER STORIES are the only scientifiction magazines on the market which are worthy of the name and as a loyal subscriber I must protest that the mediocrity of your recent covers belies the real quality of your magazines in the science fiction field.

I believe that Bergey has been maligned over a long period and that his work is best next to the work of Virgil Finlay. Finlay's conception of weird entities and also his depiction of ordinary scenes carry a curiously effective undercurrent of the supernatural and I have found that his illustrations contribute sometimes as much as fifty per cent to the effectiveness of certain stories which he has illustrated. As salesmen in the field of fantasy I hardly need refer you to the combination of Finlay and Lovecraft in past issues of other magazines. I have an idea that Finley's fee is considerably higher than some other fantasy artists and can therefore see that you must use him sparingly. However, please use him as much as possible

Best regards and keep up the good work with your three fantasy mags. Please try to get away from the blood and thunder adventure stories you have been printing lately and give us more of the high type of story with which you entered the field —Fall River, Mass

That's plain talk, Kiwi Hown. And now I've got something else to get off my chest. Grin, you marsh apes, because the old Sarge is girding up his loins to take a good belt at you. I've sat in this astrogation seat for many moons of Jupiter (and Jupiter has more moons than a Martian skitar drunk on Xeno) and listened to you space dizzies blast the magazine out from under me.

Well, I've prevailed on the editors to let the old space dog review the Fan Magazines for a few revolutions. By the spiked Hydinkus plants of Neptune, is this going to be good! Will I take the epidermis off your southern exposure. But that can wait. While I sit back and run my fingers idly over the bank of rocket keys, and gloat, let's be digging down through the file of spatial bilge you rats have spilled.

Heres' one written in back-hand and full of some back-handed compliments.

LET'S GO MONTHLY

By Gilbert Sanchez

Just finished reading THE GODS HATE KANSAS. Will pass in a pinch

I have read S. S. more than a year. Best in Scientifiction except CAPTAIN FUTURE. Well to start off about myself. This, by the way, is the first time I have written to you so I am hoping you will print it. I am 16 years old, go to High School and take printing there. First, I want to approve of Paul Cox who said in the last issue about having a black background with a comet or something on the cover. That is the best idea I've heard yet for a cover

I have read every story of CAPTAIN FUTURE. That is the best mag I have ever read in S. F. In S. S some stories are tops, but others—I have nothing to say about them. The best story I have ever read in S. S. was THE PRISONER OF MARS also THE THREE PLANETEERS was also very good. Edmond Hamilton is a good author with a good **Mind.** Friend's story of THE KID FROM MARS was a flop. But-t-t THE WATER WORLD was good. YANK AT VALHALLA was also a good story. Here are my ratings

FOR A BETTER JOB AND BIGGER PAY

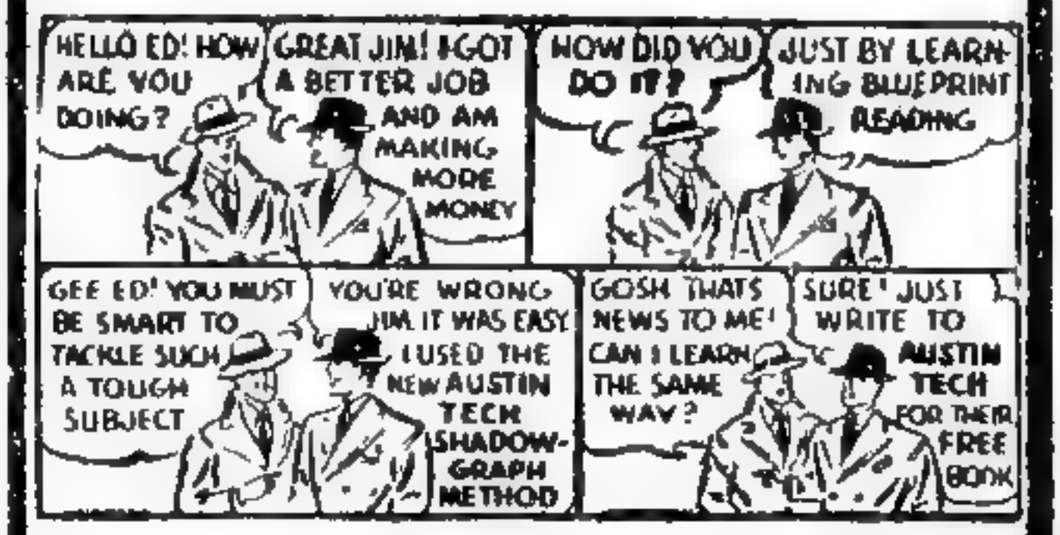
Learn

BLUEPRINT READING

AMAZING NEW INVENTION

Makes Blueprint Reading Easy as Seeing a Movie

NOW, at last an Amazing New Invention has been perfected by Outstanding Experts exclusively for Austin Technical Institute—an invention that makes Blueprint Reading easy as A.B.C. Better Jobs and Bigger Pay are now waiting for men who can read Blueprints. If you can read English, YOU, too, can learn to read Blueprints EASILY, QUICKLY —RIGHT AT HOME—IN SPARE TIME at an amazingly low cost—through this Shortcut, Inexpensive, Sensational New "Shadowgraph" Method.


HELLO ED! HOW ARE YOU DOING?
GREAT JIM! I GOT A BETTER JOB AND AM MAKING MORE MONEY
HOW DID YOU DO IT?
JUST BY LEARNING BLUEPRINT READING
GEE ED! YOU MUST BE SMART TO TACKLE SUCH A TOUGH SUBJECT
YOU'RE WRONG JIM. IT WAS EASY I USED THE NEW AUSTIN TECH SHADOW-GRAPH METHOD
GOSH THATS NEWS TO ME! CAN I LEARN THE SAME WAY?
SURE! JUST WRITE TO AUSTIN TECH FOR THEIR FREE BOOK

THOUSANDS OF MEN WANTED—AT ONCE

Every day—thousands of factories engaged in National Defense work call for men of ALL ages, who are qualified to work from Blueprints. "Must be able to work from Blueprints"—that's the way WANT ADS read these days. It doesn't matter whether you are a machinist, mechanic, carpenter, plumber, steamfitter, truck driver, student, office worker—whatever your occupation—Blueprint Reading opens up for you the quickest, surest way to win a Better Job and Bigger Pay. Write today for our FREE Illustrated Book and full details.

FREE ILLUSTRATED BOOK

SEND THIS COUPON FOR YOUR FREE BOOK

AUSTIN TECHNICAL INSTITUTE Div. T.G.-1
899 Broad Street, Div. T.G.-1, Newark, New Jersey

Send me FREE, without obligation, your Illustrated Book, "STEP UP TO A BETTER JOB AND BIGGER PAY," also, full details.

Name .....

Address ... .

City .. .. State.....

[*Turn page*]

BLEEDING GUMS TRENCH-MOUTH MOUTH INFECTIONS

Bad enough in themselves but some of them may lead to other infections, such as

PYORRHEA

If you are a sufferer from any of these mouth infections, why not try **PY-RO**, a simple home remedy which has been used with beneficial results many times

If your gums bleed . . . if there is evidence of pus . . . or your teeth are loose, give **PY-RO** a trial and see for yourself if it does not give you the aid you are seeking

We have on file numerous letters from grateful persons who have used **PY-RO**, evidencing the improvement of gum infections and of the satisfactory results obtained

Order today — Send no money!

USE PY-RO!

We believe that **PY-RO** will quickly convince you of its ability to help correct any of the above conditions from which you believe you are suffering. DO NOT DELAY! Send $2.00 and we pay postage, or pay postman $2.00 plus C.O.D. charges. Use **PY-RO** as directed and if not entirely satisfied with the results, we will gladly refund the purchase price in full.

ORALENE, INC., Dept. 801
501 West 139th Street New York City, N. Y.

SONG POEM

WRITERS:

ject for our plan and **FREE** Rhyming Dictionary at once
RICHARD BROS., 74 Woods Building, Chicago, Illinois

Send us your original poem, Mother, Home, Love, Sacred, Patriotic, Comic or any sub

SUCCESS OPPORTUNITIES! FREE

DO YOU WANT TO GET AHEAD?

NOW is the time to get a better job, better pay, knowledge and culture that spell happiness, success. See big 1942 illustrated catalog of authoritative, simplified books on aviation, accounting, engineering, English, drafting, radio, history, typewriting, machine shop work, Spanish, secretarial practice, and a hundred other subjects. Many slightly used, as low as 45c, postpaid. Money back if not satisfied. Write for FREE catalog NOW

HOME STUDY BOOK CO.
Dept. 712, 1251 S. Wabash Ave., Chicago, Ill.

CATALOG HOME STUDY BOOKS Save ½

FLASH THIS SPARKLER!

No need for $1000 diamonds when these fiery BLU BRITE mined Zircons dazzle everyone

FREE! Write for special catalog of Zircon diamonds that cut glass; stand acid—98% cheaper than diamonds.

KIMBERLY GEM CO., Inc.
503 5th Ave., N. Y. C. Dept. 31

FREE One 25c Size Sample. Enclose 3c Stamp to Cover Mailing. **FOR**

STOMACH ULCER

Pain, Heartburn, Gas and Other Distress Due to Gastric Hyperacidity

Learn all about this remarkable, inexpensive home treatment. Pain often relieved promptly. No rigid or liquid diet. We will also send you, FREE with this sample, an informative booklet on this simple home treatment. Send for sample.

TWIN CITY VON CO., Dept. G-209, Minneapolis, Minn.

1. PRISONER FROM MARS
2. THREE PLANETEERS
3. GATEWAY TO PARADISE
4. WATER WORLD
5. BRIDGE TO EARTH
6. BOTTOM OF THE WORLD
7. THE GODS HATE KANSAS
8. KID FROM MARS

Your short stories are fair, but I don't like short stories, just book-length novels. That is why I do not buy T. W. S., just S. S. and C. F. sometimes. I have read every S. F. mag there is, but I just stick to S. S. and C. F.

Let's have more of Bergey, Belarski is all right for drawing girls, but the rest is poor. Let's have S. S. monthly and lots more of Hamilton.—315 So. Sixth St., Albuquerque, N. M.

So you like the way Belarski can draw girls, eh? If memory doesn't fail the old Sarge at this point, you are not the first to comment on the Belarski gals. Do you think he has been studying the murals in the spacemen's cafes here and there about the System? I mind one picture in the Dead Rocket saloon on Mercury, just above the bar. That green-skinned woman from—br-r-r-m-m-m—but never mind that right now. I'll talk to Belarski later.

Here's a flash from Massachusetts.

NUTS TO KATIE!

By A. R. Barron

Well it's been six months now since I bought my first STARTLING STORIES mag. I have never regretted it and now feel that I am qualified to rave and rant along with the rest of the fans. First of all PLEASE get Bergey to do your covers. Second, how about something new in the way of a book-length novel? I personally am getting pretty sick of the degenerate world of the future as typified by "Water World," "Gateway to Paradise," and "The Bottom of the World." How about some time-traveling stories, or stories of the past, or even stories of the present? Anything for a change.

Below, you will find all the stories in S. S. in order of my preference

1: "A Million Years to Conquer," by Henry Kuttner. Absolutely the best novel I have yet read in S. S

2: "A Yank at Valhalla," by Edmond Hamilton Let's have more like it

3: "Sojarr of Titan," by Wellman. Clever and exciting to say the least

4: "Gateway to Paradise," by Williamson. I'm ashamed to say it, but I'm prejudiced

5 "The Water World," by Friend. I expect something better than that from Friend.

6: "The Bottom of the World," by the Burroughs. Terrible.

Could you tell me how much it would cost to get all the issues up to and including Vol. 4 (Four) No. 2 (Two)?

And, incidentally, if anybody wants to make something of it, I am a kid and see no reason to be ashamed of it after all I dole out the price of the mag with the rest of the fans including a certain Miss Baum!!!

Yours till the next issue.—500 Main St., Melrose, Mass.

Well, see here, Pee-lot Barron, the old Sarge will let you say almost anything you please in this department, but don't you know better than to take a poke at a lady? It's far safer to jump down the throat of a Venusian swamp tiger than to aim at the gal pilots, even with a light tap. I mind the time I tried to step in beween a Jovian freighter engineer and his gal friend when they were having an argument.

Sure, I whipped the engineer, but that crazy dame I thought I was protecting

whammed me over the head with a bottle of bug-juice from the table, and I woke up en route to Mars with the ship's doctor distilling Xeno out of my curly locks.

Before I seal the air-locks and blast off for another cargo of beefs let me repeat a few simple instructions for you space-dizzy birds. In writing to me, always date and sign your letters. If you're going to stand upon your hind legs in this assembly, push up your gravity belt rheostat a couple of notches to hold you to the hull plates, and speak right out boldly as though you're proud of what you have to say. Otherwise, I read your anonymous ethergrams and blush in private.

And how about voting on HALL OF FAME CLASSICS for publication? Just choose a good yarn and write me a one-hundred-word letter telling me why, and the best letter on the story selected will be published—along with the Hall of Fame Classic.

And how about all SCIENCE FICTION LEAGUE chapters reporting in? The old Sarge mentioned this in the last issue of THRILLING WONDER STORIES, which sponsors the club. I repeat it here. We want all chapters to report in. We are re-zoning the country, opening new chapters and officially burying those few which have become defunct. If you need a new charter for your chapter, write us. And write in, anyway.

In the meantime, pleasant voyages to you space-bugs, and keep out of dimensional warps. —SERGEANT SATURN,

The Old Space Dog.

READ OUR COMPANION SCIENCE FICTION MAGAZINE

THRILLING WONDER STORIES

Coming in the February Issue

VIA JUPITER

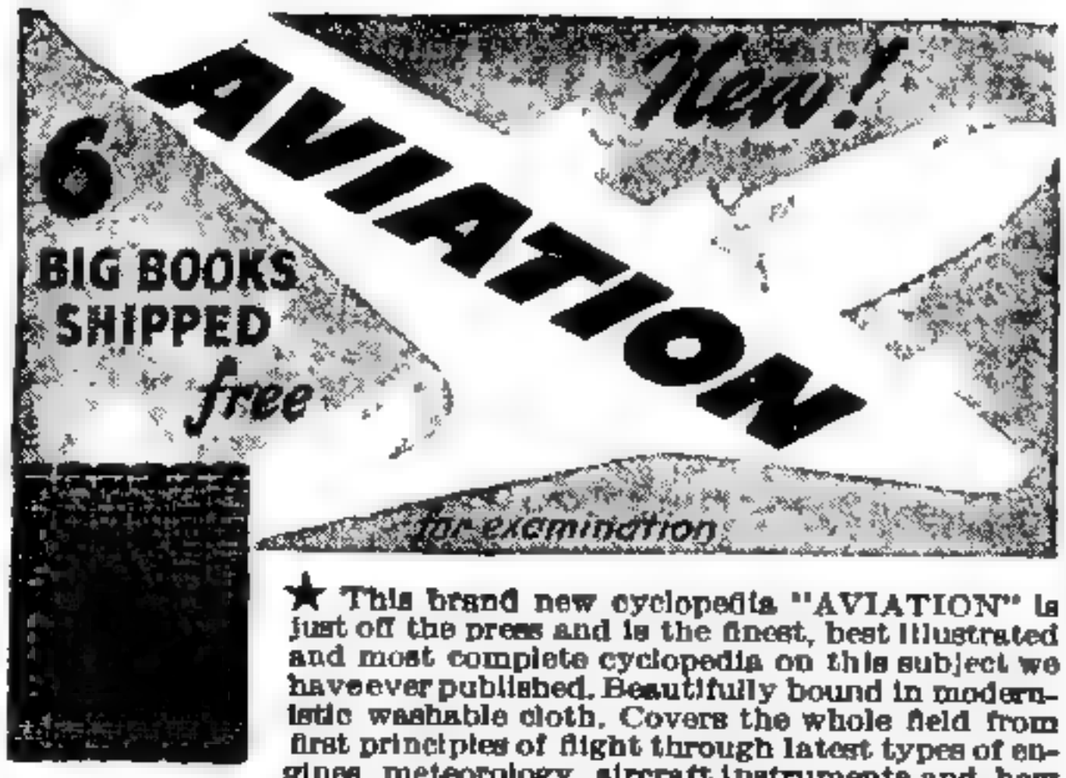
An Amazing Complete Full-Length Interplanetary Novel

By EANDO BINDER

AND MANY OTHER STORIES

•

NOW ON SALE 15¢ AT ALL STANDS



★ This brand new cyclopedia "AVIATION" is just off the press and is the finest, best illustrated and most complete cyclopedia on this subject we haveever published. Beautifully bound in modernistic washable cloth. Covers the whole field from first principles of flight through latest types of engines, meteorology, aircraft instruments and how to read them, gliding, parachute packs, etc. Every man interested in flying, whether amateur or expert, should have these books; sent for free examination, no money down, no deposit.

Wonderful New Field

National Defense has opened up tremendous opportunities in Aviation. It is the fastest growing industry today. Huge new plants are being built. Get into this field now. Send the coupon for free examination Get this brand new up-to-the-minute cyclopedia NOW.

American Technical Society, Dept. H-149
Drexel at 58th St., Chicago, Ill.

Send for 10 days' trial brand new 6 volume set, Aviation. I will pay the delivery charges only. If I wish I may return books in ten days and owe you nothing, but if I decide to keep them I will send $2.00 after 10 days, then only $3.00 a month until $19.80, the total price, is paid Send brand new edition which includes Aviation Blueprint Reading and free consulting service for one year.

Name .....

Address .....

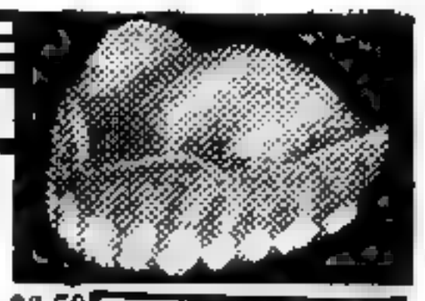
Please attach letter, stating age, occupation, employer's name and address and that of at least one business man as a reference.

INVENTORS

Protect your idea with a Patent. Don't delay. Get Free "Patent Guide." No charge for preliminary information. Write us today.

CLARENCE A. O'BRIEN—*Registered Patent Attorney*
2A8 Adams Building Washington, D. C.

FALSE TEETH



MONEY RETURNED IF NOT SATISFIED!

$6.50 up

Order by mail—a wide selection of styles. As LOW AS $6.50 a plate. Your money back if not satisfied.

90 Days' Wearing Trial

Ask for free descriptive circular showing different styles and FREE impression material. Ask about our budget savings plan Gold crown given with plates No. 2 to No 6 Write today

INDIVIDUALLY Made from YOUR Mouth Impression

SEND NO MONEY

90 Days' Trial

Ward Dental Lab. 936 W. 63 St. Dept. 26A, Chicago

SONG & POEM WRITERS

NEW SONGWRITERS in great demand Send us your Poems. We set them to music FREE Hear your song on a record. Send for FREE Folder today.

CINEMA SONG CO., P.O. Box 2828, Dept. B-9, Hollywood, Calif.

Learn To **MOUNT BIRDS**

Tan SKINS, Make Up FURS

Be a Taxidermist. *Double your hunting fun.* We teach you **at Home.** Mount **Birds, Animals, Pets, Heads and Fish.** Save your hunting trophies; decorate home and den. **MAKE MONEY.** Mount and Groom-tan for others. Big spare-time profits **INVESTIGATE TODAY.**

FREE BOOK with 100 game pictures. 48 pages. Hunters, get yours! It's Now Free. Send postal card **TODAY -- This Minute!** State your **AGE.**

NORTHWESTERN SCHOOL OF TAXIDERMY, Dept. 4171, Omaha, Nebr.

Help Kidneys If Back Aches

Do you feel older than you are or suffer from Getting Up Nights, Backache, Nervousness, Leg Pains, Dizziness Swollen Ankles, Rheumatic Pains, Burning, scanty or frequent passages? If so, remember that your Kidneys are vital to your health and that these symptoms may be due to non-organic and non-systemic Kidney and Bladder troubles in such cases CYSTEX (a physician's prescription) usually gives prompt and joyous relief by helping the Kidneys flush out poisonous excess acids and wastes. You have everything to gain and nothing to lose in trying **Cystex.** An iron-clad guarantee wrapped around each package assures a refund of your money on return of empty package unless fully satisfied. Don't take chances on any Kidney medicine that is not guaranteed. Don't delay. Get **Cystex** (Sis-tex) from your druggist today. **Only 35c.** The guarantee protects you.

Cystex
Helps Flush Kidneys

ASTHMA TREATMENT mailed on **Free Trial.** If satisfied send $1; if not, it's **Free.** Write me for your treatment today.
W. K. STERLINE, 830 Ohio Ave., Sidney, Ohio

CRIME DETECTION
FINGER PRINTS
SECRET SERVICE BOOK
FREE
For 30 Days Reading
No Money Down—Actual Crime Cases—
If You Act Quick!—We will send you this stirring book on Crime Detection, Secret Service and Identification Work for 30 days free reading. Send no money. If you decide to keep it, then send me only $1.00. If not, return it. WRITE TODAY. Literature sent only to persons stating their age.
T. G. Cooke, Dept. 7961, 1920 Sunnyside Ave., Chicago, Ill.

DICE. CARDS.
Specialties for Magicians use. Inks. Shiners, Check-Cop, Daubs. Catalog ten cents, stamps or coin.
HILL BROS., Box T, Salida, Colo.

PILES Try this Wonderful Treatment for Pile Suffering FREE
If you are troubled with itching, bleeding or protruding piles, write for a FREE sample of Page's Combination Treatment and you may bless the day you read this. Don't wait, WRITE TODAY.
E. R. PAGE COMPANY, Dept. 421-H-2, Marshall, Michigan or Toronto (5) Ontario, Can.

USED Correspondence Courses
Complete home-study courses and educational books, slightly used. Sold, rented, exchanged. All subjects. Money-back guarantee. Cash paid for used courses. Full details and illustrated 72-page bargain catalog FREE. Write today!
NELSON CO
500 Sherman, Dept. N-227, Chicago

OLD LAPSED LIFE INSURANCE POLICIES
Have an Actual Cash Value
NEW MANUAL TELLS YOU HOW TO COLLECT. Our files are filled with cash collections made on **OLD LAPSED LIFE INSURANCE POLICIES.** All the simple instructions for collection on Lapsed Insurance are embodied in our "*Old Lapsed Policy Recovery Manual.*" Nothing like it. $1 paid. Money Back if not delighted. **POLICY HOLDERS BUREAU, P. O. Box 717, Dept. 28, Chicago**

OLD LEG TROUBLE
Easy to use Viscose Method heals many old leg sores caused by leg congestion, varicose veins, swollen legs and injuries or no cost for TRIAL. Describe your trouble and get FREE BOOK.
T. G. VISCOSE METHOD COMPANY
140 N. Dearborn Street, Chicago, Illinois

REVIEW OF THE SCIENCE FICTION FAN PUBLICATIONS

By

SERGEANT SATURN

WELL, well, fancy meeting you space rats here! After all the strings and errors of outrageous format, to paraphrase Shakespeare, that I've had to put up with in the reader departments, what a distinct pleasure this review is going to be for the old space dog. So you Xeno-drunk space harpies want to know what a professional astrogator thinks of fan mags? Scramble my type and call me pi-eyed. Fan mags on parade. Like a row of rocket ships en route to Pluto. Here's where the old Sarge pours on the fuel.

ECLIPSE (bi-monthly), 13958 Cheyenne, Detroit, Mich. Richard J. Kuhn, editor. This issue, Lynn Bridges and Rudy Sayn.

Nice line drawings, well balanced text, but why the five colors of printing ink? Very colorful but it makes the old Sarge feel like he had swallowed the rainbow. Talk about Captain Future's colored rings, eh? This positively eclipses me. Thirty pages of pretty fair rocket fuel.

FANART (quarterly), 2409 Santee Avenue, Columbia, So. Carolina. Harry Jenkins, editor.

Mostly line drawings. As wild a collection of freaks as the old Sarge ever found in the bottom of a Xeno jug. The editors liked one blue devil so well, they sent me an extra print for framing. If you fans want nightmares, I recommend this one for midnight examination.

FANTASIA (quarterly), 269 Sixteenth Ave., San Francisco, Cal. Lou Gladstone, editor.

Going high-hat on the old Sarge, eh? Slick illustrations and clever dingbats to garnish the text. In general, a nice lay-out, but what in ten moons of Jupiter is the style script used for the sub-heads? Venusian swamp tracks? It's hard enough for the old Sarge to read modern English. Otherwise, okay, you can put this one on the telecast.

FANTASY TIMES (monthly), 137-07 32nd Ave., Flushing, N.Y. James V. Taurasi, editor. Also
NEW FANDOM (Fall, 1941), Sam Moskowitz and James V. Taurasi.

What in the name of space devils is this? A pair of pretty salmon-colored covers with

(Turn to page 128)

Special Offer!

Garret Smith's Famous Book

BETWEEN WORLDS

Our Low Price....50c

Our Gold Plated Blue and Maroon

SCIENCE FICTION LEAGUE BUTTON

Regular Price 25c

BOTH FOR 50¢ IF YOU ORDER NOW!

Mail your order to THRILLING WONDER STORIES, 10 E. 40th Street, New York City, N. Y. Enclose coin, postage stamps of small denominations (1-2-3c) or money order. Please mention this ad.

ATTENTION, FANS!

8 SCIENTIFICTION TITLES 25c

Here's your opportunity to obtain a complete set of outstanding scientifiction titles, printed on excellent grade paper, attractively bound. Six individual booklets.

SEND FOR THEM TODAY!

The titles include THE IMMORTALS OF MERCURY, by Clark Ashton Smith; THE SPECTRE BULLET, by Thomas Mack; AVENGING NOTE, by Alfred Sprissler; THE SHIP FROM NOWHERE, by Sidney Patzer; THE MOON MIRAGE, by Raymond Z. Gallun; FLIGHT OF THE AEROFIX, by Maurice Renard; THE INVADING ASTEROID, by Manly Wade Wellman; MEN FROM THE METEOR, by Pansy Black.

BOOK DEPT., 14th Floor, 10 East 40th St., New York

Enclosed 25c in coin (or) stamps. Please rush my set of 8 scientifiction titles.

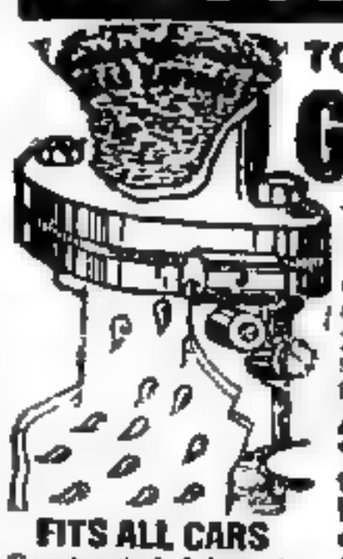
Name .....

Address .....

City..... State.....

8-S.-1

MOTORISTS Wanted!



FITS ALL CARS

Constructed of six parts fused into a single unit, adjusted and *sealed at the factory*. Easily and quickly installed by anyone in a few minutes.

TO MAKE THIS *UNIQUE*

GAS SAVING TEST

Will you permit us to send you at our risk the Vacu-matic, a device which autoowners everywhere are praising? Install it on your car. Test it at our risk. Unless it trims dollars off your gas bills by saving up to 30% on gasoline consumption, gives more power, quicker pickup and faster acceleration, the test will cost you nothing.

Automatic Supercharge Principle

Vacu-matic is *entirely different!* It operates on the supercharge principle by automatically adding a charge of extra oxygen, drawn free from the outer air into the heart of the gas mixture. It is entirely automatic and allows the motor to "breathe" at the correct time, opening and closing as required. Saves up to 30% on gas costs, with better motor performance.

AGENTS Get Yours FREE

FOR INTRODUCING. Here's a splendid opportunity for unusual sales and profits. Every car, truck, tractor owner a prospect. Send name and address now for big money making offer and how you can get yours Free.

The Vacu-matic Co., 7617-619 W. State Street, Wauwatosa, Wis.

High School Course at Home

Many Finish In 2 Years

Go as rapidly as your time and abilities permit. Course equivalent to resident school work—prepares for college entrance exams. Standard H. S. texts supplied. Diploma. Credit for H. S. subjects already completed. Single subjects if desired. High school education is very important for advancement in business and industry and socially. Don't be handicapped all your life. Be a High School graduate. Start your training now. Free Bulletin on request. No obligation.

American School, Dpt. H-158, Drexel at 58th, Chicago

SINUS HEAD COLDS CATARRH

TRY THIS FOR RELIEF OF THE NASAL CONGESTION

To ease such nasal congestion symptoms as sniffling, sneezing, hawking, stuffed-up feeling, watery eyes, roaring ears and pounding pressure, FLUSH the nasal passage with SINASIPTEC. Based on a physician's successful prescription. SINASIPTEC washes out thick, crusty, sticky, old mucous as it soothes and reduces swollen, irritated tissue. Ask your druggists.

Send Today for An Amazing 25c Test

Just mail 25c with name, address today for new special complete *Sinasiptec* and *Nasal Douche* package for thorough trial to American Drug Corp., Dept. B12, 6060 Maple, St. Louis, Mo.

FALSE TEETH Low as $6.85

90 DAYS TRIAL
TEST THEM
EXAMINE THEM

We make FALSE TEETH for you BY MAIL from your mouth-impression. Money-Back GUARANTEE of Satisfaction. FREE impression material, directions. Booklet of New Styles and Information. Write today to

FREE

SEND NO MONEY

PARKER DENTAL LAB., 127 N. Dearborn St., Dept. 17, Chicago, Ill.

"730 SHAVES FROM 1 BLADE"

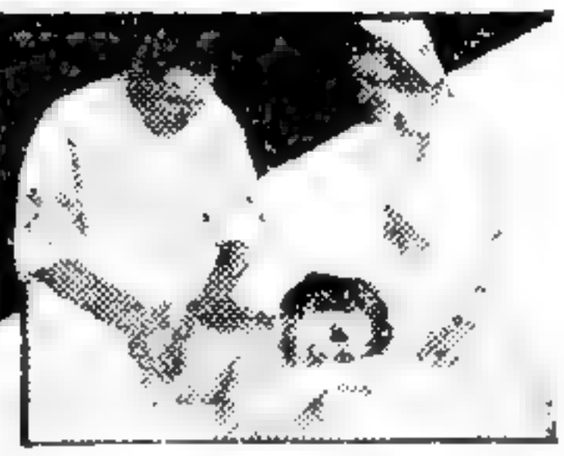
AMAZING NEW BLADE SHARPENER

New sharpener for all makes of double-edge razor blades performs miracles! "Not necessary to change blades," writes one user. Another says, "Have used 1 blade over 730 times." RAZOROLL really sharpens blades because it strops on leather. Gives keen, smooth shaving edges. No guess work. Blade held at correct angle and proper pressure—automatically. Just turn crank to sharpen blade. No gears. Well made. Handsome—compact—in attractive case. Weighs few ounces. Will last years. Makes ideal gift.

SEND NO MONEY! Write today. Pay postman only $1.00 plus few cents postage. Use Razoroll for 5 days and if you're not delighted with smooth, velvet shaves you get, return RAZOROLL and we'll return your dollar. Hurry—order today.

RAZOROLL CO., 620 N. Michigan, Dept. 201, Chicago, Ill.

Learn this Profitable Profession



in 90 Days at Home

Hundreds of men and women of all ages 18-50 make $10.00 to $20.00 in a single day giving scientific Swedish Massage and Hydro-Therapy treatments. There is a big demand from Hospitals, Sanitariums, Clubs, Doctors and private patients as well as opportunities for establishing your own office.

Learn this interesting money-making profession in your own home by mail, through our home study course. Same instructors as in our NATIONALLY KNOWN resident school. A diploma is awarded upon completion of the course. Course can be completed in 3 to 4 months. High School training is not necessary. Many earn big money while learning.

Anatomy Charts & Booklet FREE

Enroll now and we will include uniform coat, medical dictionary, patented reducing roller and Hydro-Therapy supplies without extra cost. The reducing course alone may be worth many times the modest tuition fee.

Send coupon now for Anatomy Charts and booklet containing photographs and letters from successful graduates. These will all be sent postpaid—FREE.

THE College of Swedish Massage
Dept. 163—30 E. Adams St., Chicago

You may send me FREE and postpaid, Anatomy Charts, booklet containing photographs and letters from graduates, and complete details of your offer.

Name .....

Address .....

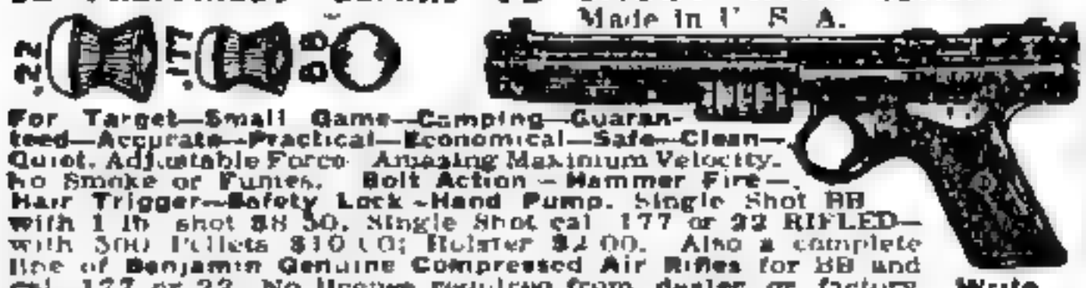
City ..... State.....

ITCH STOPPED *in a Jiffy* —or Money Back

For quick relief from itching of eczema, pimples, athlete's foot, scales, scabies, rashes and other externally caused skin troubles, use world-famous, cooling, antiseptic, liquid D. D. D. Prescription. Greaseless, stainless. Soothes irritation and quickly stops the most intense itching. 35c trial bottle proves it, or money back. Ask your druggist today for **D. D. D. PRESCRIPTION.**

BE PREPARED! LEARN TO SHOOT WITH *BENJAMIN*

Made in U. S. A.



For Target—Small Game—Camping—Guaranteed—Accurate—Practical—Economical—Safe—Clean—Quiet. Adjustable Force. Amazing Maximum Velocity. No Smoke or Fumes. Bolt Action—Hammer Fire—Hair Trigger—Safety Lock—Hand Pump. Single Shot BB with 1 lb. shot $8.50. Single Shot cal. 177 or 22 RIFLED—with 500 Pellets $10.00; Holster $2.00. Also a complete line of Benjamin Genuine Compressed Air Rifles for BB and cal. 177 or 22. No license required from dealer or factory. Write today for complete specifications and free targets.

BENJAMIN AIR RIFLE CO., 880 Marion St., St. Louis, Mo., U. S. A.

FALSE TEETH

AS LOW AS $7.95

Per Plate. Dental plates are made in our own laboratory from your personal impression. WORKMANSHIP and Material GUARANTEED or PURCHASE PRICE REFUNDED. We take this risk on our 60-Day Trial Offer.

DO NOT SEND ANY MONEY Mail post card for FREE material and catalog of our LOW PRICES.

DON'T PUT IT OFF — Write us today!

Brighton-Thomas Dental Laboratory
DEPT. 946 6217 S. HALSTED STREET, CHICAGO, ILL.

Exciting Stories of British Pilots in

RAF ACES

NOW ON SALE 10c AT ALL STANDS

only one white sheet between one pair. Reminds the old Sarge of a drugstore sandwich. Nice wrappings, kiwis; where's the package?

FFF ILLUSTRATED NEWS WEEKLY. 1702 Duhill Road, Brooklyn, N.Y. Julius Ungor, editor.

Two sheets (four pages) of single spaced type. Newsy enough, but sans illustrations. Two empty boxes on pages two and three stare like a pair of burned ray-gun holes in a freighter's hull. Spaces for rent, or is the reader to draw his own illustrations? Either illustrate or take down your sign, kiwi.

INFINITE (bi-monthly), 5809 Beechwood Ave., Indianapolis, Ind. Leonard Marlow and Claude Degler, editors.

Brand-new! Volume 1, Number 1. Snappy contents. Wise guys, eh? Funny stuff. Making fresh with science fiction. The old Sarge is going to have to pin you down in a special gravity field. Headings and art work like the fizzle of a sick rocket. But maybe you peerlots never complain about my artists. This issue good for several belly laughs.

SOUTHERN STAR (approximately bi-monthly), 1100 Bryan St., city and state not given, but this is a Dixie Press Publication, and presumably from Columbia, S.C. Joseph Gilbert and Art R. Sehnert, editors.

Nicely got up, but another one of those sunbursts of color due to printer's colic. Good articles. But your steno needs more practice in stencil cutting. And if you're going to print so close to the margins (which you shouldn't) you should indent your paragraphs deeper and leave a line space between paragraphs. You leave no more room than the dance floor in a Martian space port. But you can pass your first astrogator's test on the text matter.

SPACEWAYS (eight times yearly), 303 Bryan Place, Hagerstown, Md. Harry Warner, Jr., editor.

Now why in the name of the ring-legged Cheezalops of Mercury do you print some excellent articles without suitable headings, and no illustrations? Save for the kiwi getting ready to take a nap on an elephant's deflated trunk and a Martian robot being struck by lightning on the front and back covers, you've got page after page of solid and single-spaced reading matter, even including the inside of the mauve covers. What I said about SOUTHERN STAR goes for you. How can we read the astrogation chart if you cram the hold so full of freight?

SUN SPOTS (bi-monthly), 31 Bogert Place, Westwood, N.J. Roderick Gaetz, Bob Blanchard and Gerry de la Ree, Jr., editors.

Format too much like a Sunday school circular. Increase the size. Sure, I know paper costs money. Use the third inner skin of the Martian skitar. It makes good parchment, and Manly Wellman can tell you how to trap that Red Planet mammal. But what do you know, the dang chart's printed in regular eight-point type. Uptown stuff. All you need is some copy. You've got professional contributors.

VOICE OF IMAGI-NATION (eight times annually), Box 6475 Metropolitan Station, Los Angeles, Cal. Ackerman and Morojo, editors.

Starts off like a wow with a cover illustration by Tom Wright that looks like a Finlay drawing. Makes the old Sarge space-sick. Who wouldn't go star-roving after a gal like that? Hello—what's this? Layers of half-pages and an occasional turn-down full page. Can't you boys make up your minds, or have you just completed a course in paper-folding?

More of that crowded copy, too. It takes an avid kiwi to plod through all that. Personally, the old Sarge would rather plow through a Venusian swamp without gravity soles. A couple of neat cartoons, and quite a lot of news. But your last issue was a better one.

Well, I've run out of fuel. Here I am stranded in space, and not another fan mag to use as a take-off for free spacing back to port. That's one on the old space dog. I knew I was pulling my rocket blasts too much. Never mind, I'll drift around here in the ether until Captain Future picks me up.

I'll burn you space dizzies up on the next review—but—good luck to all of you. Yours in the inky brotherhood.

—*Sergeant Saturn.*

Editor's note: If you fan mag publishers want Sergeant Saturn to wisecrack reviews of your magazines, send in your current copies. Sergeant Saturn will review only current copies received between publication dates of STARTLING STORIES.

THRILLS IN SCIENCE

(Concluded from page 82)

Today, flying fortresses, once easy prey for lighter attackers, now fly at high speed far above the earth, demonstrating a maneuverability and a ceiling that has baffled and staggered the house-painter of Berchtesgaten. Today at seventy years of age, the future is just opening up for Dr. Sanford A. Moss.

Perhaps he stands occasionally back there on that rock ledge with that ghost man and that young lad and envisions another day when airships will ply their peaceful way through the stratosphere around the earth in twenty-four hours. Perhaps he sees sub-stratosphere liners and freighters girdling the world in international travel and commerce. Perhaps he sees the next step to be a take-off for spatial voyaging, with man at last reaching up for the stars.

"You said to build a good one, Father," he murmurs. "Instead of a fortune, perhaps there will be a blessing for all mankind."

FOR SCIENTIFICTION AT ITS BEST READ

STARTLING STORIES

EVERY ISSUE!

SAVE ON TIRES

BUY NOW

Before Rubber Goes Higher

GOODYEAR-FIRESTONE

GOODRICH-FISK-U.S.

And Other Standard Makes

National Defense calls for rubber conservation! Crude rubber prices are up! Tires are getting scarcer daily. **Our Standard Brand** reconditioned tires, serviceably repaired by experts with high-grade materials, will solve the tire problem for you. Only our **26 years' experience** and volume sales make these **low prices** possible. Take advantage of them today. Don't delay. ORDER NOW.

BALLOON TIRES

Size	Tires	Tubes
29x4.40-21	$2.25	$1.06
29x4.50-20	2.35	1.06
30x4.50-21	2.40	1.15
28x4.75-19	2.45	1.26
29x4.75-20	2.50	1.26
29x5.00-19	2.85	1.25
30x5.00-20	2.85	1.25
5.25-17	2.90	1.35
28x5.25-18	2.90	1.35
29x5.25-19	2.95	1.35
30x5.25-20	2.95	1.35
31x5.25-21	3.25	1.35
5.50-17	3.35	1.40
28x5.50-18	3.35	1.40
29x5.50-19	3.35	1.45
6.00-16	3.75	1.45
6.00-17	3.40	1.40
30x6.00-18	3.40	1.40
31x6.00-19	3.40	1.45
32x6.00-20	3.45	1.55
33x6.00-21	3.85	1.55
32x6.50-20	3.75	1.75

UNCONDITIONAL GUARANTEE

Our **Guarantee Bond** agrees to replace at half price tires failing for any reason whatsoever, to give **full 9 months' service.** Replacements f. o. b. Chicago.

TRUCK BALLOONS

Size	Tires	Tubes
6.00-20	$4.25	$1.65
6.50-20	4.45	1.95
7.00-20	5.95	2.95
7.50-20	6.95	3.75
8.25-20	9.95	5.65
9.00-20	10.95	5.95

ORDER TODAY

HEAVY DUTY TRUCK TIRES

Size	Tires	Tubes
30x6	$4.25	$1.95
32x6	7.95	2.95
34x7	10.95	4.65
38x7	10.95	4.65
36x8	11.45	4.95
40x8	13.25	4.95

ALL OTHER SIZES

SEND ONLY $1.00 DEPOSIT on each tire ordered. ($3.00 on each Truck Tire.) We ship balance C. O. D. Deduct **5 per cent** if cash is sent in full with order. To fill order promptly we may substitute brands if necessary. ALL TUBES BRAND NEW—GUARANTEED—

PERRY-FIELD TIRE & RUBBER CO.
1720 S. Michigan Ave., Dept. TF-50, Chicago

SONG POEMS WANTED
TO BE SET TO MUSIC
Free Examination. Send Your Poems to
J. CHAS. McNEIL, MASTER OF MUSIC
810-TF So. Alexandria Los Angeles, Calif.

Free for Asthma During Winter

IF you suffer with those terrible attacks of Asthma when it is cold and damp; if raw, Wintry winds make you choke as if each gasp for breath was the very last; if restful sleep is impossible because of the struggle to breathe; if you feel the disease is slowly wearing your life away, don't fail to send at once to the Frontier Asthma Co. for a free trial of a remarkable method. No matter where you live or whether you have any faith in any remedy under the Sun, send for this free trial. If you have suffered for a lifetime and tried everything you could learn of without relief; even if you are utterly discouraged, do not abandon hope but send today for this free trial. It will cost you nothing. Address
Frontier Asthma Co. 41-J Frontier Bldg.
462 Niagara St. Buffalo, N. Y.

LAW STUDY AT HOME

Legally trained men win higher positions and bigger success in business and public life. Greater opportunities now than ever before. Big corporations are headed by men with legal training.

More Ability: More Prestige: More Money

We guide you step by step. You can train at home during spare time. Degree of LL. B. Successful graduates in every section of the U. S. We furnish all text material, including 14-volume Law Library. Low cost, easy terms. Get our valuable 48-page "Law Training for Leadership" and "Evidence" books FREE. Send for them NOW.

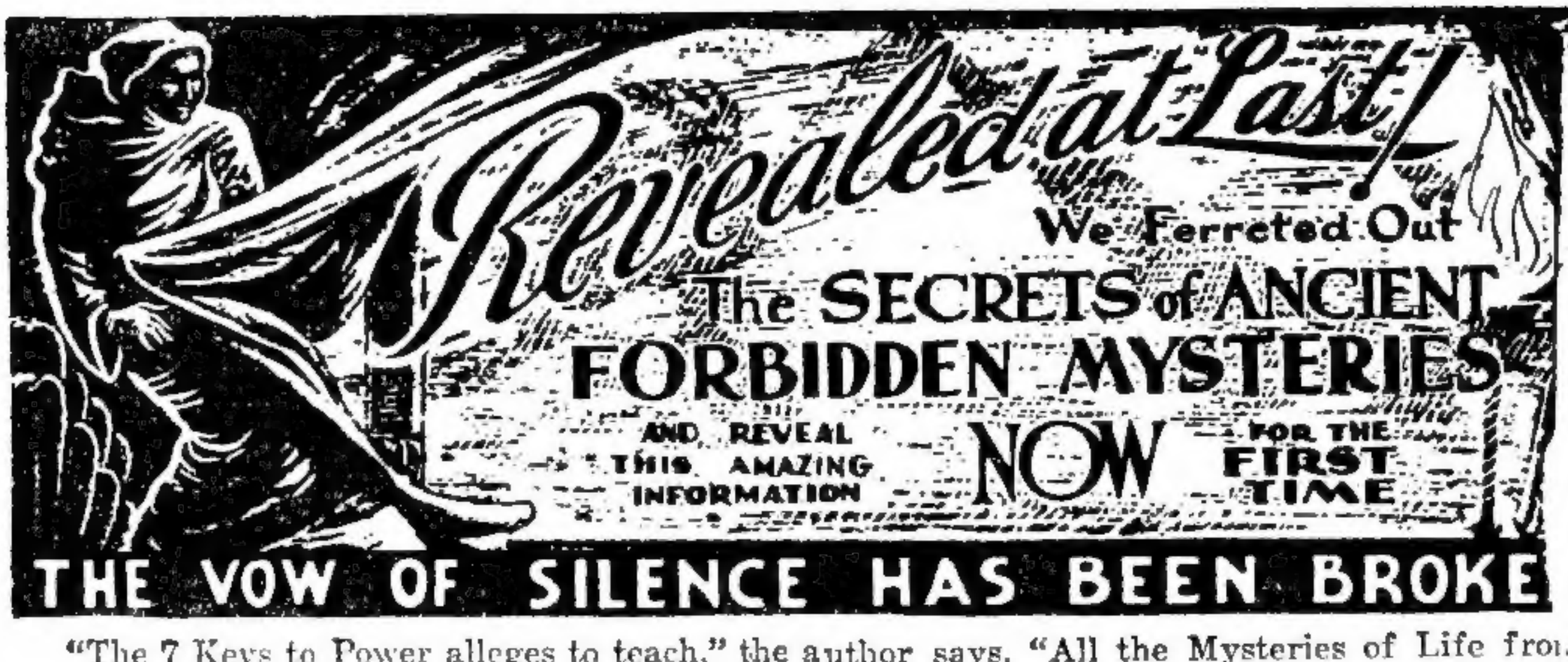
LaSalle Extension University, Dept. 1329-L Chicago
A Correspondence Institution

ANY PHOTO ENLARGED

Size 8 x 10 inches or smaller if desired. Same price for full length or bust form, groups, landscapes, pet animals, etc., or enlargements of any part of group picture. Safe return of original photo guaranteed.

47c
3 for $1.00

SEND NO MONEY Just mail photo or snapshot (any size) and within a week you will receive your beautiful enlargement, guaranteed fadeless. Pay postman 47c plus postage—or send 49c with order and we pay postage. **Big 16x20-inch enlargement** sent C. O. D. 78c plus postage or send 80c and we pay postage. Take advantage of this amazing offer now. Send your photos today. Specify size wanted.
STANDARD ART STUDIOS, 113 S. Jefferson St., Dept. 402-A, Chicago



"The 7 Keys to Power alleges to teach," the author says, "All the Mysteries of Life fro. the Cradle to the Grave—and Beyond. It claims to tell you the particular day and hour to do anything you desire, whether it be in the light of the moon, sun, or in total darkness."

He claims, "The power to get what you want revealed at last, for the first time since the dawn of creation. The very same power which the ancient Chaldeans, Greeks, Egyptians, Babylonians and Sumerians used is at our disposal today."

He says, "Follow the simple directions, and you can do anything you desire. No one can tell how these Master Forces are used without knowing about this book, but with it you can mold anyone to your will."

From this book, he says, "You can learn the arts of an old Science as practiced by the Ancient Orders. Their marvels were almost beyond belief. You, too, can learn to do t em all with the instructions written in this Book." Lewis de Claremont claims. "It would be a shame if these things could all be yours and you failed to grasp them."

He claims, "It is every man's birthright to have these things of life: MONEY! GOOD HEALTH! HAPPINESS! If you lack any of these, then this book has an important message for you. No matter what you need, there exists a spiritual power which is abundantly able to bring you whatever things you need."

OVERCOME ALL ENEMIES, OBSTACLES & HIDDEN FEARS

THERE ARE THINGS WITHIN YOUR GRASP THAT CAN BE OBTAINED TO REMOVE THE CAUSE
THE 7 KEYS TO POWER
New! REVISED EDITION!
SEND NO MONEY
ORDER NOW!

ARE YOU CROSSED IN ANY WAY?

The Seven Keys to Power, Lewis de Claremont says, shows y how to remove and cast it back.

The Book Purports to Tell You How to—

Gain affection and admiration.
Adjust disputes.
Obtain property.
Make people do your bidding.
Make any person respect you.
Make people bring back stolen goods.
Make anyone lucky in any games.
Feel strong and fit.
Get any job you want.
Understand mental telepathy.
Help people in trouble.
Banish all misery.
Gain the mastery of all things.
Restore your ambition.
Choose words according to ancient, holy methods.

THE ONLY TRUE BOOK OF SUPREME MASTERSHIP!

This is the Power, he says, from which the old masters gained their knowledge and from which they sold limitless portions to certain favorec Kings and others at high prices, but never to be revealed under a vow the violation of which entailed severe punishment.

THE VOW HAS NOW BEEN BROKEN

This book, he claims, shows you the secrets of old which when prop erly applied make you able to control the will of all without their know ing it. If you have a problem and you wish to solve it, he says, don hesitate. Advertisements cannot describe nor do this wonderful book jus tice. You must read it and digest its meaning to really appreciate i worth.

GUARANTEED TO SATISFY OR YOUR MONEY REFUNDED

Only a limited number available for sale, so don't wait. It is worth many times its price. If you are wise, you will rush your order for this book NOW.

$1.

MR. LUCK'S CURIO CO., Dept. 518
800 N. Clark Street..
Chicago, Illinois.

This coupon is worth $1.00 to you. Attach a Money Order for $1 to this coupon and we will send you your copy of The Seven Keys to Power. Regularly $2 for only $1.

Name .....

Address .....

City ..... State.....

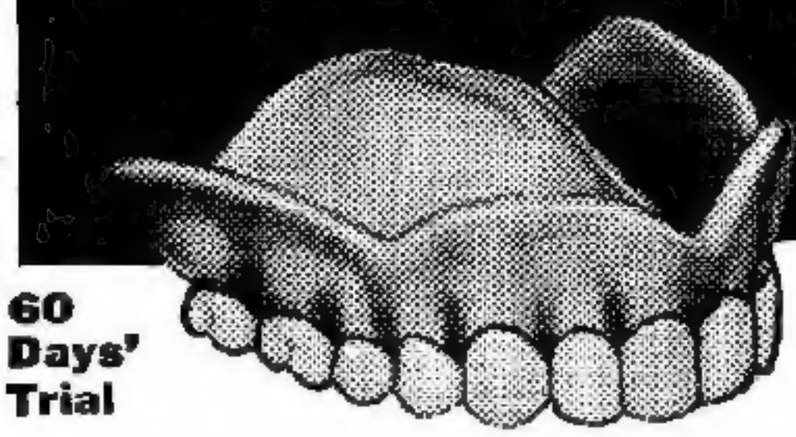
SEND NO MONEY!

If you wish we Trust You. . . . Pay Postman $1 on delivery plus a few pennies Postage. Check here ( ).

Enjoy BEAUTIFUL Natural-Looking FALSE TEETH

LOWEST PRICES

SEND NO MONEY

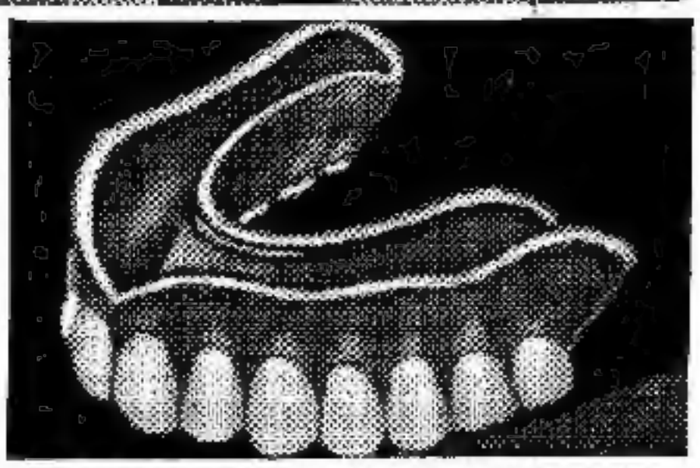


60 Days' Trial

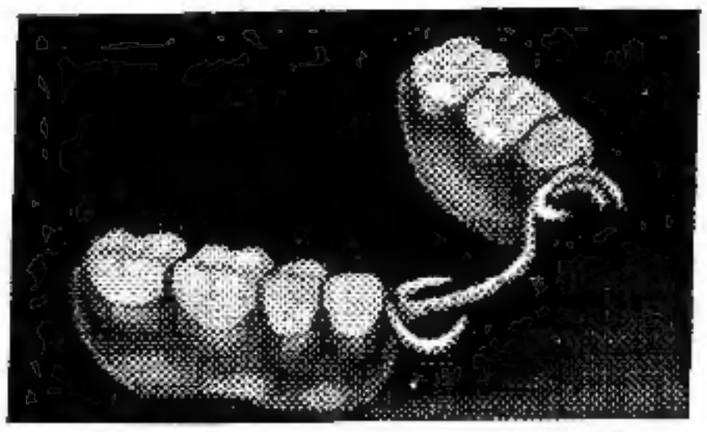
Mouth Comfort!

ELSIE E. BOLAND, Norton, Kansas, writes:

"Enclosed find two pictures. One shows how I looked before I got my teeth; the other one, afterwards. Your teeth are certainly beautiful. They look more natural than some that cost three and four times what I paid for mine."



UNBREAKABLE ROOFLESS



UNBREAKABLE PARTIAL

FIT-RITE TEETH BY MAIL

We make to measure to fit you individually—BY MAIL—the World's No. 1 FIT-RITE Dental Plates for men and women—from an impression of your own mouth taken quickly and easily by our FIT-RITE improved method. We have thousands of enthusiastic satisfied customers all over the country wearing teeth we made by mail at sensible prices.

MRS. MARTHA A. WEBB, Jacksonville, Florida, writes: "My plate is not only a perfect fit, but a beautiful piece of work. I took my own impression under your instructions without the least difficulty. I could not have duplicated my plate here for less than four times the price you charged me."

MR. RAYMOND MILLS, Elgin, Illinois, writes: "It affords me great pleasure to inform you that I have experienced no difficulty in using this plate with comfort and without the assistance of any dental adhesive. I am now able to masticate different varieties of food, as well as raw apples and hard candy, just as well as I did with my natural teeth. During the trial period, not a single sign of gum soreness developed."

AT ROCK-BOTTOM PRICES

If you find out what others have paid for theirs, you will be astounded when you see how little ours will cost you! By reading our catalog, you will learn how to save half or more on dental plates for yourself. Monthly payments possible.

ON 60 DAYS' TRIAL

Make us prove you can't beat our fit, work or price. Wear our teeth on trial for as long as 60 days. Then, if you are not perfectly satisfied with them, they will not cost you a cent.

With Money-Back Guarantee of Satisfaction

No money need be risked. We guarantee that if you are not completely satisfied with the teeth we make for you, then any time within 60 days we will immediately refund every cent you have paid us for them. We take your word.

Try FIT-RITE False Teeth TO EAT WITH PLEASURE . . . TO LAUGH HEARTILY . . . TO LOOK YEARS YOUNGER . . . TO GUARD YOUR HEALTH . . . TO SPEAK DISTINCTLY . . . TO ENJOY LIFE!

OUR dentures are set with life-like, pearly-white, genuine, porcelain teeth; constructed from finest materials, with expert workmanship, to give life-long service. We make all styles of plates. A dentist who has had many years' experience in making and fitting dental plates, that look right and fit right supervises the making of each plate.

MAIL THIS COUPON NOW

FREE UNITED STATES DENTAL COMPANY

Dept. E-82, 1555 Milwaukee Ave.
CHICAGO, ILLINOIS

Send, without obligation, your **FREE** impression material, catalog, and easy directions.

NAME .....

ADDRESS .....

(Print Clearly)

FREE IMPRESSION MATERIAL, catalog with new low prices and easy directions. Don't put this off. Do it TODAY! CLIP COUPON OR WRITE.

Nowhere Else Can You Obtain Genuine FIT-RITE False Teeth

We Also Repair or Reproduce Old Plates—48-Hour Service

UNITED STATES DENTAL COMPANY

THE WORLD'S LARGEST LABORATORY MAKING DENTAL PLATES ONLY

DR. G. M. COLLINS, CHIEF OF STAFF

1555-1557 MILWAUKEE AVE., DEPT. E-82, CHICAGO, ILLINOIS

One LIFE INSURANCE POLICY INSURES YOUR ENTIRE FAMILY!

TOTAL COST

Only $1 A MONTH

PAYS FOR ALL

INSURES PARENTS, CHILDREN (Married or Unmarried) BROTHERS, SISTERS and GRANDPARENTS . . . Ages 1 to 65

★ Now, modern life insurance methods make it possible for *all* of your family, including in-laws, to be insured in one policy paying guaranteed benefits for death from any cause.

Instead of issuing five or six policies to include mother, father, sons and daughters, even grandparents, we now issue just one policy that insures them all . . . and at one low cost price of only $1.00 a month.

Guarantee Reserve

FAMILY POLICY

INSURES FROM 2 to 6 MEMBERS OF YOUR FAMILY

$1,422.00	For Natural or Ordinary Accidental Death
$2,844.00	For Auto Accidental Death
$4,266.00	For Travel Accidental Death

The figures shown above represent the insurance provided by the policy on a typical average family of five persons.

GUARANTEE RESERVE LIFE INSURANCE COMPANY
DEPARTMENT 17-B, HAMMOND, INDIANA

NO AGENT WILL CALL

10-DAY FREE INSPECTION OFFER

SEND NO MONEY

COMPUTED ON LEGAL RESERVE BASIS

To guarantee payment on each death that occurs in your insured family, we have figured this policy out on the strict legal reserve basis, complying with State government requirements in every respect. This is your assurance of *Cash When You Need It Most.* Claims are paid at once . . . without argument or delay. State records verify our fair and just settlements.

Guarantee Reserve specializes in full family coverage, that's why we can offer safe, guaranteed life insurance on your whole family at one low price of only $1.00 a month.

NO MEDICAL EXAMINATION

To eliminate costly doctor fees, etc., we have eliminated Medical Examination. All people from age 1 to 65, in good health may be included in this new type Guarantee Reserve family policy. No membership fees, no examination fees, no *policy* fee . . . $1.00 a month pays for one policy that insures all.

RUSH—MAIL AT ONCE—DON'T DELAY

Guarantee Reserve LIFE INSURANCE CO.

GUARANTEE RESERVE BLDG., Dept. 17-B, Hammond Ind.

Gentlemen: Without obligation, please send me at once complete information on how to get your Family Life Policy for FREE inspection.

Name .....

Address .....

City ..... *State* .....